

L Number	Hits	Search Text	DB	Time stamp
-	2	("20020057837").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/19 10:45
-	5	((handwrit\$5 or hand\$ldrawn or user\$drawn or stroke or writting) near5 (recogni\$4 or identif\$7) near5 (software or program or module)) same (internet or network)) and ((character or stroke or alpha or letter) near7 (integer or number) near7 (recogni\$4 or identif\$7))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/19 11:18
-	124	((handwrit\$5 or hand\$ldrawn or user\$drawn or stroke or writting) near5 (recogni\$4 or identif\$7) near5 (software or program or module))) and ((character or stroke or alpha or letter) near7 (integer or number) near7 (recogni\$4 or identif\$7))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/19 17:40
-	288919	382/313,314, 315, 187,188,189,119,186.ccls. 345/173,179,180,182,183,158.ccls. 178/18.03.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/20 10:40
-	31	((handwrit\$5 or hand\$ldrawn or user\$drawn or stroke or writting) near5 (recogni\$4 or identif\$7) near5 (software or program or module))) and ((character or stroke or alpha or letter) near7 (integer or number) near7 (recogni\$4 or identif\$7))) and "45"	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/19 11:21
-	25	((handwrit\$5 or hand\$ldrawn or user\$drawn or stroke or writting) near5 (recogni\$4 or identif\$7) near5 (software or program or module))) and ((character or stroke or alpha or letter) near7 (integer or number) near7 (recogni\$4 or identif\$7))) and (382/313,314, 315, 187,188,189,119,186.ccls. 345/173,179,180,182,183,158.ccls. 178/18.03.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/19 11:21
-	144	((handwrit\$5 or hand\$ldrawn or user\$drawn or stroke or writting) near5 (recogni\$4 or identif\$7) near5 (software or program or module))) and ((character or stroke or alpha or letter) near7 (integer or number or ascii or binary) near7 (recogni\$4 or identif\$7))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/19 12:40
-	32	(382/313,314, 315, 187,188,189,119,186.ccls. 345/173,179,180,182,183,158.ccls. 178/18.03.ccls.) and (((handwrit\$5 or hand\$ldrawn or user\$drawn or stroke or writting) near5 (recogni\$4 or identif\$7) near5 (software or program or module))) and ((character or stroke or alpha or letter) near7 (integer or number or ascii or binary) near7 (recogni\$4 or identif\$7)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/19 12:40
-	1	((handwrit\$5 or hand\$ldrawn or user\$drawn or stroke or writting) near5 (recogni\$4 or identif\$7) near5 (software or program or module))) and ((chain near3 code) same (north or south or east or west or direction or axis))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/19 17:44
-	3	((handwrit\$5 or hand\$ldrawn or user\$ldrawn or stroke or writting) near5 (recogni\$4 or identif\$7)) same (software or program or module))) and ((chain near3 code) same (north or south or east or west or direction or axis))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/20 10:39

-	50	("4524454" "4578811" "4628532" "4653107" "4757551" "4961231" "5333209" "5481625" "5526440" "5528700" "5537489" "5563959" "5579408" "5586198" "5590220" "5592565" "5649027" "5673337" "5680478" "5680479" "5684891" "5719959" "5732154" "5742702" "5742705" "5757962" "5784504" "5787202" "5809183" "5841902" "5845020" "5881172" "5911005" "5923793" "5926564" "5940532" "5940535" "5943438" "5966464" "5991439" "6023529" "6081616" "6101270" "6114764" "6115506" "6185332" "6208756" "6226404" "6240209" "6252984").PN.	USPAT	2004/08/19 17:46
-	0	6721452.URPN.	USPAT	2004/08/19 18:08
-	0	6721452.URPN.	USPAT	2004/08/19 18:08
-	1220	((((handwrit\$5 or hand\$ldrawn or user\$ldrawn or stroke or writting) near5 (recogni\$4 or identif\$7)))) and ((chain near3 code) or stroke) same (north or south or east or west or direction or axis))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/20 10:41
-	288918	382/313,314, 315, 187,188,189,119,186.ccls. 345/173,179,180,182,183,158.ccls. 178/18.03.ccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/20 10:41
-	145	(((((handwrit\$5 or hand\$ldrawn or user\$ldrawn or stroke or writting) near5 (recogni\$4 or identif\$7)))) and ((chain near3 code) or stroke) same (north or south or east or west or direction or axis))) and (382/313,314, 315, 187,188,189,119,186.ccls. 345/173,179,180,182,183,158.ccls. 178/18.03.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/20 10:41
-	243	(((((handwrit\$5 or hand\$ldrawn or user\$ldrawn or stroke or writting) near5 (recogni\$4 or identif\$7)))) and (software or program) and (internet or network) and (((chain near3 code) or stroke) same (north or south or east or west or direction or axis))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/20 10:42
-	44	(382/313,314, 315, 187,188,189,119,186.ccls. 345/173,179,180,182,183,158.ccls. 178/18.03.ccls.) and (((((handwrit\$5 or hand\$ldrawn or user\$ldrawn or stroke or writting) near5 (recogni\$4 or identif\$7)))) and (software or program) and (internet or network) and (((chain near3 code) or stroke) same (north or south or east or west or direction or axis)))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2004/08/20 10:42

File 2:INSPEC 1969-2004/Aug W2
(c) 2004 Institution of Electrical Engineers
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File 94:JICST-EPlus 1985-2004/Jul W4
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File 99:Wilson Appl. Sci & Tech Abs 1983-2004/Jul
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(c) 2004 American Mathematical Society
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File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
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(c)2001 ProQuest Info&Learning
File 483:Newspaper Abs Daily 1986-2004/Aug 19
(c) 2004 ProQuest Info&Learning
File 248:PIRA 1975-2004/Aug W2
(c) 2004 Pira International

Set	Items	Description
S1	13405	HANDWRITING OR HAND()WRITING
S2	259	PENMANSHIP
S3	3816	(USER OR HAND)(3N)(DRAW? OR SCRIBBL?)
S4	172079	STROKES OR STROKING OR STROKE OR STROKED
S5	35250	S4 AND (DIRECTION? OR PLACEMENT? OR POSITION? OR DISTANCE - OR FLOW? OR COORDINANT??? OR XY OR EAST OR WEST OR NORTH OR SOUTH)
S6	233851	TIME(3N)(LIMIT?? OR THRESHOLD? OR PERIOD? OR DURATION)
S7	53200	(PRESELECT? OR (PRE() (SELECT? OR SET OR DETERMIN? OR SELECT? OR SPECIFIED) OR PREDETERMIN? OR SPECIFIC OR SPECIFIED OR - SET OR PRESET))(3N)(TIME OR DURATION)
S8	25140	S4 AND (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? OR NUMERICAL OR NUMERAL??)
S9	2849296	(CHARACTER?) AND (RECOGN? OR ANALYSIS OR ANALYZ? OR DETECT? OR DETERMIN? OR EVALUAT? OR ASSES?)
S10	560414	S9 AND (DIRECTION? OR PLACEMENT? OR POSITION? OR DISTANCE - OR FLOW? OR COORDINATE?? OR XY OR EAST OR WEST OR NORTH OR SOUTH)
S11	3219	AU=(WILKINSON, T? OR MEHLITZ, P? OR WILKINSON T? OR MEHLITZ P?)
S12	3	TRANSVIRTUAL()TECHNOLOGIES
S13	326	(S1 OR S2 OR S3) AND S5
S14	87	S13 AND (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? OR NUMERICAL OR NUMERAL??)
S15	1	S14 AND (S6 OR S7)
S16	0	S15 NOT CHILDREN

S17 3 RD S12 (unique items)
S18 33 S11 AND (S1 OR S9)
S19 1 S18 AND S4
S20 0 S19 NOT ELDERLY
S21 296 S1 AND S8
S22 237 S21 AND S9
S23 7 S22 AND (DIRECTION? OR PLACEMENT? OR POSITION? OR DISTANCE
OR FLOW? OR COORDINANT??? OR XY OR EAST OR WEST OR NORTH OR SO-
UTH) AND MOV?
S24 7 S23 NOT (S15 OR S12 OR S19)
S25 4 RD S24 (unique items)
S26 6216 S10 AND (S6 OR S7)
S27 4 S26 AND HAND(3N)(MOV? OR GESTURE??)
S28 4 S27 NOT (S23 OR S15 OR S12 OR S19)
S29 3 RD S28 (unique items)

17/3,K/1 (Item 1 from file: 99)
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs
(c) 2004 The HW Wilson Co. All rts. reserv.

2314904 H.W. WILSON RECORD NUMBER: BAST01035637
Development tools make waves at LinuxWorld Conference/Expo
AUGMENTED TITLE: New York, NY, 2001
Wong, William;
Electronic Design v. 49 no6 (Mar. 19 2001) p. 29-30
DOCUMENT TYPE: Feature Article ISSN: 0013-4872

...ABSTRACT: premiered at the LinuxWorld Conference and Expo in New York City is presented. These include **TransVirtual Technologies** ' PocketLinux, Borland's Kylix, LynuxWork's Visual LynuxWorks, Lineo's Embedix SDK for Windows and...

17/3,K/2 (Item 1 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.
(c) 2003 EBSCO Pub. All rts. reserv.

00602691 00CR05-102
Need a refill? Free Java on Web
Montalbano, Elizabeth
Computer Reseller News , May 8, 2000 , n893 p1, 8, 2 Page(s)
ISSN: 0893-8377
Company Name: Semiotek; Lutris Technologies; **Transvirtual Technologies**
URL: <http://www.transvirtual.com>
Product Name: WebMacro; Enhydra; Kaffe JVM
Company Name: Semiotek; Lutris Technologies; **Transvirtual Technologies**
...Inc. and Enhydra from Lutris Technologies Inc.; and Kaffe JVM, a Java virtual machine from **Transvirtual Technologies** Inc. Notes that use of the product often turns into a contract for the provider...
Identifiers: WebMacro; Enhydra; Kaffe JVM; Semiotek; Lutris Technologies; **Transvirtual Technologies**

17/3,K/3 (Item 1 from file: 483)
DIALOG(R)File 483:Newspaper Abs Daily
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05584343
Microsoft-Backed Transvirtual Clones Key Elements of Sun's Java Language
Gomes, Lee
Wall Street Journal, Sec B, p 8, col 5
Jun 14, 1999
ISSN: 0099-9660 NEWSPAPER CODE: WSJ
DOCUMENT TYPE: News; Newspaper
LANGUAGE: English RECORD TYPE: ABSTRACT
LENGTH: Medium (6-18 col inches)

ABSTRACT: **Transvirtual Technologies** Inc., a closely held six-person start-up in Berkeley, Calif., said it is introducing...

COMPANY INFORMATION:
Transvirtual Technologies Inc...
?

25/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2004 Institution of Electrical Engineers. All rts. reserv.

4924681 INSPEC Abstract Number: C9505-5540B-013

Title: Alphanumeric entry on pen-based computers

Author(s): MacKenzie, I.S.; Nonnecke, B.; Ridderisma, S.; McQueen, C.; Meltz, M.

Author Affiliation: Dept. of Comput. & Inf. Sci., Guelph Univ., Ont., Canada

Journal: International Journal of Human-Computer Studies vol.41, no.5 p.775-92

Publication Date: Nov. 1994 Country of Publication: UK

CODEN: IHSTEI ISSN: 1071-5819

U.S. Copyright Clearance Center Code: 1071-5819/94/110775+18\$08.00/0

Language: English

Subfile: C

Copyright 1995, IEE

...Abstract: based computers. For numeric entry, the conditions were hand printing, tapping on a soft keypad, **stroking** a **moving** pie menu, and **stroking** a pie pad. For the pie conditions, **strokes** are made in the **direction** that **numbers** appear on a clock face. For the **moving** pie menu, **strokes** were made directly in the application, as with hand printing. For the pie pad, **strokes** were made on top of one another on a separate pie pad, with the results...

...18.5 wpm, 10.4% errors), pie pad (15.1 wpm, 14.6% errors), and **moving** pie menu (12.4 wpm, 16.4% errors). For text entry, the conditions were hand ...

... layout, and tapping on a soft keyboard with an ABC layout (two rows of sequential **characters**). Tapping on the soft QWERTY keyboard was the quickest (23 wpm) and most accurate (1...

... of entry speed and accuracy using a stylus to tap on a soft keyboard. Although **handwriting** (with **recognition**) is touted as the entry method of choice for pen based computers, the much simpler...

...Identifiers: **moving** pie menu

25/3,K/2 (Item 1 from file: 34)

DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

(c) 2004 Inst for Sci Info. All rts. reserv.

03430849 Genuine Article#: PE057 No. References: 23

Title: CHARACTERISTICS OF HANDWRITING OF PATIENTS WITH HUNTINGTONS-DISEASE

Author(s): PHILLIPS JG; BRADSHAW JL; CHIU E; BRADSHAW JA

Corporate Source: MONASH UNIV,DEPT PSYCHOL/CLAYTON/VIC 3168/AUSTRALIA/;
UNIV MELBOURNE,DEPT PSYCHIAT,HUNTINGTONS DIS CLIN/PARKVILLE/VIC
3052/AUSTRALIA/

Journal: MOVEMENT DISORDERS, 1994, V9, N5 (SEP), P521-530

ISSN: 0885-3185

Language: ENGLISH Document Type: ARTICLE (Abstract Available)

Title: CHARACTERISTICS OF HANDWRITING OF PATIENTS WITH HUNTINGTONS-DISEASE

Abstract: Patients with Huntington's disease exhibit poorer-quality **handwriting** , sometimes clinically exhibiting macrographia, an increase

in the size of **handwriting** . To **characterize** deficits in **handwriting** of patients with Huntington's disease, we compared the writing of 12 young, 12 age...

...letter 'l' four times, at a constant length, on a graphics tablet that sampled pen **position** at 200 Hz. Huntington's disease causes chorea (involuntary **movement**), akinesia (difficulty in initiating voluntary **movement**), and bradykinesia (slowness and difficulty in maintaining voluntary **movement**). To distinguish changes in **handwriting** quality due to involuntary **movement** from impairments of voluntary **movement** , **handwriting** samples with obvious choreic **movements** were **analyzed** separately from other **handwriting** samples. Several measures of quality of **handwriting** were considered, based on: the regularity and consistency of **handwriting** , the efficiency of **movement** trajectories, and the proportions of **movement** occurring at specific frequencies. Results suggested that Huntington's disease increases variability of **movement** parameters, and causes problems in producing smooth **movements** . Choreic **movement** was best **characterized** by the **number** of zero crossings in the velocity function relative to the prescribed **number** of writing **strokes** . We hypothesize that macrographia in Huntington's disease occurs when chorea predominates over bradykinesia. Comparisons were made between the **handwriting** of patients with Huntington's and Parkinson's diseases.

...Identifiers--PARKINSONS-DISEASE; **MOVEMENT**

25/3,K/3 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus
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02057325 JICST ACCESSION NUMBER: 94A0470071 FILE SEGMENT: JICST-E
A Simple On-line Handwriting Verification Based on Up-down Signals of a Pen.
AGUI TAKESHI (1); NAGAHASHI HIROSHI (1); ETO IKUO (1); NAGAO TOMOHARU (1)
(1) Grad. Sch. at Nagatsuta Tokyo Inst. of Technol.
Nippon Insatsu Gakkaishi(Bulletin of the Japanese Society of Printing
Science and Technology), 1994, VOL.31,NO.2, PAGE.134-140, FIG.9, TBL.3,
REF.6
JOURNAL NUMBER: G0233ABD ISSN NO: 0914-3319
UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02+
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

A Simple On-line Handwriting Verification Based on Up-down Signals of a Pen.

ABSTRACT: This paper describes a simple method to verify **handwriting** mainly based on up-down pen **movements** of writing process. Many schemes have been proposed for on-line **handwriting** verification, and it is known that reliable **recognition** can be reached if we use various kinds of information such as the velocity and...

...obtained easily by simple tools like a touching panel. Therefore, the authors have considered trustworthy **handwriting** verification using as less data as possible. As the result, high **recognition** ratio was obtained by the use of timing of pen-up and pen-down, and **directions** of first and last **movements** of each **stroke** of Kanji **characters** representing one's family name. Practical and reliable person

verification can be realized by the use of both this method and other simple verification information such as identification **number** .
(author abst.)

25/3,K/4 (Item 1 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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03608273

HANDWRITING RECOGNITION TECHNOLOGY DEVELOPED
US - **HANDWRITING RECOGNITION TECHNOLOGY DEVELOPED**
Electronics Weekly (ECW) 18 July 1990 p8
ISSN: 0013-5224

HANDWRITING RECOGNITION TECHNOLOGY DEVELOPED
US - **HANDWRITING RECOGNITION TECHNOLOGY DEVELOPED**

IBM and GRiD (both US) have each developed a computer-based method for **recognising** hand-written **characters** . GRiD has introduced the GRiDPad, a portable electronic notepad which uses a stylus to write on the computer screen. The system **recognises numbers** and block capitals. IBM has **moved** a step further and claims its Paperlike Interface can **recognise** cursive writing. The system analyses **characters stroke** by **stroke** , making **recognition** quicker than analysing a complete **character** . Article compares the two systems.

...COUNTRY: **North American Countries**
?

29/3,K/1 (Item 1 from file: 34)
DIALOG(R) File 34:SciSearch(R) Cited Ref Sci
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05916252 Genuine Article#: XG490 No. References: 83

Title: Discrete and continuous planning of hand movements and isometric force trajectories

Author(s): Ghez C (REPRINT) ; Favilla M; Ghilardi MF; Gordon J; Bermejo R; Pullman S

Corporate Source: COLUMBIA UNIV,CTR NEUROBIOL & BEHAV, 722 W 168TH ST/NEW YORK//NY/10032 (REPRINT); COLUMBIA UNIV COLL PHYS & SURG,DEPT NEUROL/NEW YORK//NY/10032; UNIV MILAN,HS RAFFAELE, CNR, INB/MILAN//ITALY//; UNIV FERRARA,IST FISIOL UMANA/I-44100 FERRARA//ITALY//; NEW YORK MED COLL,PROGRAM PHYS THERAPY/VALHALLA//NY/10595; CUNY HUNTER COLL,/NEW YORK//NY/10021

Journal: EXPERIMENTAL BRAIN RESEARCH, 1997, V115, N2 (JUN), P217-233

ISSN: 0014-4819 Publication date: 19970600

Publisher: SPRINGER VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010

Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

Title: Discrete and continuous planning of hand movements and isometric force trajectories

...Abstract: impulses of isometric elbow force to unpredictable targets, subjects selected default values for amplitude and **direction** according the range of targets that they expected. Once a specific target appeared, subjects specified amplitude and **direction** through parallel processes. Amplitude was specified continuously from an average or central default; **direction** was specified stochastically from one of the target **directions**. Using the same timed response paradigm, we now report three experiments to examine how the time available for processing target information influences trajectory **characteristics** in two-degree-of-freedom forces and multijoint movements. We first sought to **determine** whether the specification of force **direction** could also take the form of a discrete stochastic process in pulses of wrist muscle force, where **direction** can vary continuously. With four equiprobable targets (two force amplitudes in each of two **directions** separated by 22 degrees or 90 degrees), amplitude was specified from a central default value for both narrow and wide target separations as a continuous variable. **Direction**, however, remained specified as a discrete variable for wide target separations. For narrow target separations, the **directional** distribution of default responses suggested the presence of both discrete and central values. We next examined point-to-point movements in a multijoint planar **hand movement** task with targets at two distances and two **directions** but at five **directional** separations (from 30 degrees to 150 degrees separation). We found that extent was again specified continuously from a central default. **Direction** was specified discretely from alternative default **directions** when target separation was wide and continuously from a central default when separation was narrow. The specification of both extent and **direction** evolved over a 200-ms **time period** beginning about 100 ms after target presentation. As in elbow force pulses, extent was specified progressively in both correct and wrong **direction** responses through a progressive improvement in the scaling of acceleration and velocity peaks to the target. On the other **hand**, **movement** time and **hand** path straightness did not change significantly in the course of specification. Thus, the specification of...

...global features of the trajectories, are given priority over the specific values of extent and **direction**. In a third experiment, we

varied the distances between unidirectional target pairs and found that movement extent is specified discretely, like **direction** , when the disparity in distances is large. The implications of these findings for contextual effects on trajectory planning are discussed. The independence of extent and **direction** specification and the prior setting of response duration and straightness provide critical support for the...

29/3,K/2 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
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01750309 ORDER NO: AADAA-I9974462
Upper extremity work-related musculoskeletal disorders among textile industry workers in Indonesia
Author: Nursalim, Erna Tresnaningsih
Degree: Ph.D.
Year: 2000
Corporate Source/Institution: University of Pittsburgh (0178)
Source: VOLUME 61/06-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 3004. 190 PAGES
ISBN: 0-599-79964-1

In the textile industry, workers in production unit perform jobs that are **characterized** by repetitive **hand movement** for prolonged **periods** of **time** , and occasionally, lift loads of materials, bobbins, etc. The purpose of this study is to **determine** the prevalence of Upper Extremity Work-related Musculoskeletal Disorders (UEWMSDs) among Textile Industry workers in **West** Java province of Indonesia and explore the association between Rapid Upper Limb **Assessment** (RULA) score and the prevalence of UEWMSDs. RULA is a survey method which attempt to...

...4%), Lateral Epicondylitis (4.4%), Ganglion (2.0%), and Trigger Finger (1.5%).

Upper limb **assessment** for work-related musculoskeletal disorders was performed on 497 workers; using video recording of their jobs, the RULA scores were then calculated. Chi-square analyses **determined** the significant association between RULA score and UEWMSDs (<italic>p</italic> = 0.001). In multivariate logistic regression **analysis** , work for 10 years or more on the job, RULA score, physical fatigue, house chores...

29/3,K/3 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
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14322900 PASCAL No.: 99-0530920
Evidence for interhemispheric motor-level transfer in a simple reaction time task : an EEG study
Neural Basis of Hand Dexterity
THUT G; HAUERT C A; MORAND S; SEECK M; LANDIS T; MICHEL C
ROUILLER E M, ed; HEPP-REYMOND M C, ed; WIESENDANGER Mario, ed
Faculty of Psychology, University of Geneva, 1227 Carouge, Switzerland;
Plurifaculty Program of Cognitive Neuroscience, Functional Brain Mapping Laboratory, Department of Neurology, University Hospital Geneva, 24 Rue Micheli du Crest, 1211 Geneva, Switzerland; Department of Neurology, University Hospital HCUG, 121 Geneva, Switzerland
Laboratory of Motor Systems, Department of Neurology, Inselspital, BHH-M130, 3010 BERN, Switzerland

Journal: Experimental brain research, 1999, 128 (1-2) 256-261
Language: English

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... we recorded event-related potentials (ERPs) in 12 healthy subjects performing such a task and **analyzed** the data using techniques based on topographic ERP map **characteristics** . A method which has proved useful for associating ERP map configurations of different **time periods** with functional states of the brain was supplemented by a source localization procedure. The results...

... a functional motor level and at frontal sites, at least for left-to-right interhemispheric **direction** of transfer.

English Descriptors: Manual task; Body **movement** ; **Hand** ; Vision; Reaction time; Brain (vertebrata); Event evoked potential; Interhemispheric transfer; Topography; Visuomotor control; Motor control...

?

File 348:EUROPEAN PATENTS 1978-2004/Aug W03

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File 349:PCT FULLTEXT 1979-2002/UB=20040812,UT=20040805

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Set	Items	Description
S1	2884	HANDWRITING OR HAND()WRITING
S2	34	PENMANSHIP
S3	7273	(USER OR HAND) (3N) (DRAW? OR SCRIBBL?)
S4	71873	STROKES OR STROKING OR STROKE OR STROKED
S5	11147	S4(5N) (DIRECTION? OR PLACEMENT? OR POSITION? OR DISTANCE OR FLOW? OR COORDINAT??? OR COORDINANT? OR XY OR EAST OR WEST OR NORTH OR SOUTH)
S6	403413	TIME(3N) (LIMIT?? OR THRESHOLD? OR PERIOD? OR DURATION)
S7	148323	(PRESELECT? OR (PRE() (SELECT? OR SET OR DETERMIN? OR SELEC-T? OR SPECIFIED) OR PREDETERMIN? OR SPECIFIC OR SPECIFIED OR - SET OR PRESET)) (3N) (TIME OR DURATION)
S8	3910	S4(5N) (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? - OR NUMERICAL OR NUMERAL??)
S9	81039	(CHARACTER?) (3N) (RECOGN? OR ANALYSIS OR ANALYZ? OR DETECT? OR DETERMIN? OR EVALUAT? OR ASSES?)
S10	4418	S9(5N) (DIRECTION? OR PLACEMENT? OR POSITION? OR DISTANCE OR FLOW? OR COORDINATE?? OR COORDINANT? OR XY OR EAST OR WEST OR NORTH OR SOUTH)
S11	59	AU=(WILKINSON, T? OR MEHLITZ, P? OR WILKINSON T? OR MEHLITZ P?)
S12	24317	IC=G06K?
S13	90	(S1 OR S2) (S)S5
S14	35	S13(S) (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? - OR NUMERICAL OR NUMERAL??)
S15	26	S14 AND S12
S16	5	S15 AND AD=20000814:20040819/PR
S17	21	S15 NOT S16
S18	21	IDPAT (sorted in duplicate/non-duplicate order)
S19	21	IDPAT (primary/non-duplicate records only)
S20	1	S1 AND S11
S21	499	S5(S) (S6 OR S7)
S22	138	S21(S) (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? - OR NUMERICAL OR NUMERAL??)
S23	12	(S1 OR S12) AND S22
S24	11	S23 NOT (S15 OR S20)
S25	1	S24 AND AD=20000814:20040819/PR
S26	10	S24 NOT S25
S27	10	IDPAT (sorted in duplicate/non-duplicate order)
S28	10	IDPAT (primary/non-duplicate records only)
S29	27	S10(S)S8
S30	2	S29(S) (S6 OR S7)
S31	1	S30 NOT (S23 OR S15 OR S20)
S32	9	S5(5N) (CONVERS? OR CONVERT?) (5N) (INTEGER?? OR VALUE?? OR A-SCII OR BINARY OR NUMBER? OR NUMERICAL OR NUMERAL??)
S33	9	S32 NOT (S30 OR S23 OR S15 OR S20)
S34	9	IDPAT (sorted in duplicate/non-duplicate order)
S35	8	IDPAT (primary/non-duplicate records only)
S36	4	S35 NOT MACHIN?
S37	3	S36 NOT ENGINE?
S38	491	S3(5N) (DIRECTION? OR PLACEMENT? OR POSITION? OR DISTANCE OR FLOW? OR COORDINATE?? OR COORDINANT? OR XY OR EAST OR WEST OR NORTH OR SOUTH)
S39	0	S38(S)S4(S) (CONVERS? OR CONVERT?) (5N) (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? OR NUMERICAL OR NUMERAL??)

19/3,K/1 (Item 1 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
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00827767

An interleaved segmental method of handwriting recognition
Verschachteltes segmentbasiertes Handschrifterkennungsverfahren
Methode entremeelee et segmentale de reconnaissance d'ecriture manuscrite
PATENT ASSIGNEE:

AT&T Corp., (589370), 32 Avenue of the Americas, New York, NY 10013-2412,
(US), (applicant designated states: DE;ES;FR;GB;IT)

INVENTOR:

Brown, Michael Kenneth, 285 Lewis Street, North Plainfield, New Jersey
07060, (US)

Turin, William, 25 Hillwood Drive, East Brunswick, New Jersey 08816, (US)

Hu, Jianying, 264 Prospect Street, Apt. A3, Westfield, NJ 07090, (US)

LEGAL REPRESENTATIVE:

Watts, Christopher Malcolm Kelway, Dr. et al (37391), Lucent Technologies
(UK) Ltd, 5 Mornington Road, Woodford Green Essex, IG8 0TU, (GB)

PATENT (CC, No, Kind, Date): EP 768617 A2 970416 (Basic)
EP 768617 A3 970723

APPLICATION (CC, No, Date): EP 96307330 961009;

PRIORITY (CC, No, Date): US 543568 951016

DESIGNATED STATES: DE; ES; FR; GB; IT

INTERNATIONAL PATENT CLASS: G06K-009/34

ABSTRACT WORD COUNT: 107

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	554
SPEC A	(English)	EPAB97	2754
Total word count - document A			3308
Total word count - document B			0
Total word count - documents A + B			3308

INTERNATIONAL PATENT CLASS: G06K-009/34

...SPECIFICATION of modeling all possible segments is avoided.

A new method is also provided to improve **handwriting** recognition by proper segmentation of a **handwriting** sample. A gap feature is defined to distinguish a spatial **distance** between successive **strokes** greater than a threshold **value**, from a spatial **distance** between successive **strokes** less than the threshold **value**. Where the spatial distance is greater than the threshold **value** the alternative accumulated hypothesis scores are biased toward those scores indicating that the two successive

...are discontinuous, by adding a penalty score to those alternative hypothesis scores indicating a continuous **stroke**. Where the spatial **distance** is less than the threshold **value**, the alternative hypothesis scores are biased towards two discontinuous strokes, by adding a penalty to...

19/3,K/2 (Item 2 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00732570

Scribble matching

Kritzlervergleich

Comparaison de pattes de mouche

PATENT ASSIGNEE:

Hewlett-Packard Company, A Delaware Corporation, (3016020), 3000 Hanover Street, Palo Alto, CA 94304, (US), (Proprietor designated states: all)

INVENTOR:

Hull, Richard, 10 Newcombe Road, Westbury-on-Trym, Bristol BS9 3QS, (GB)

Gupta, Dipanker, 18 Fitzroy Road, Fishponds, Bristol BS16 3LZ, (GB)

Reynolds, David, 16 Speedwell Close, Thornbury, Bristol BS12 1UD, (GB)

LEGAL REPRESENTATIVE:

Kilgannon, Denise Mary et al (53151), Hewlett-Packard Ltd, IP Section, Building 3, Filton Road, Stoke Gifford, Bristol BS34 8QZ, (GB)

PATENT (CC, No, Kind, Date): EP 691623 A1 960110 (Basic)

EP 691623 B1 011004

APPLICATION (CC, No, Date): EP 94304890 940704;

PRIORITY (CC, No, Date): EP 94304890 940704

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/22

ABSTRACT WORD COUNT: 188

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	448
CLAIMS B	(English)	200140	504
CLAIMS B	(German)	200140	497
CLAIMS B	(French)	200140	571
SPEC A	(English)	EPAB96	7099
SPEC B	(English)	200140	7237
Total word count - document A			7548
Total word count - document B			8809
Total word count - documents A + B			16357

INTERNATIONAL PATENT CLASS: G06K-009/22

...SPECIFICATION arises when the pen starts inking before the writer's hand has quite reached the **position** where he/she intended the **stroke** to start. Such hooks are quite unstable - for the same person writing the same word several times, the **number** of hooks found will vary significantly. Thus if the scribble coding were affected by hooks...

...SPECIFICATION sequence as:

The next step is a dehooking step 42.

A very common artefact in **handwriting** captured by a digitising tablet is the hook. This arises when the pen starts inking before the writer's hand has quite reached the **position** where he/she intended the **stroke** to start. Such hooks are quite unstable - for the same person writing the same word several times, the **number** of hooks found will vary significantly. Thus if the scribble coding were affected by hooks...

19/3,K/3 (Item 3 from file: 348)

DIALOG(R) File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00699100

Method and apparatus for handwritten character recognition
Verfahren und Gerat zur Erkennung handgeschriebener Zeichen

Procède et appareil de reconnaissance de caracteres manuscrits

PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,
Tokyo, (JP), (Proprietor designated states: all)

INVENTOR:

Mori, Shigeki, c/o Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko,
Ohta-ku, Tokyo, (JP)
Matsubayashi, Kazuhiro, c/o Canon Kabushiki Kaisha, 30-2, 3-chome
Shimomaruko, Ohta-ku, Tokyo, (JP)
Harada, Takashi, c/o Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko,
Ohta-ku, Tokyo, (JP)
Yoshii, Hiroto, c/o Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko,
Ohta-ku, Tokyo, (JP)
Sakaguchi, Katsuhiko, c/o Canon Kabushiki Kaisha, 30-2, 3-chome
Shimomaruko, Ohta-ku, Tokyo, (JP)
Arai, Tsunekazu, c/o Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko,
Ohta-ku, Tokyo, (JP)
Takasu, Eiji, c/o Canon Kabushiki Kaisha, 30-2, 3-chome Shimomaruko,
Ohta-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. High Holborn
2-5 Warwick Court, London WC1R 5DJ, (GB)

PATENT (CC, No, Kind, Date): EP 665506 A2 950802 (Basic)
EP 665506 A3 960221
EP 665506 B1 000726

APPLICATION (CC, No, Date): EP 95300448 950125;

PRIORITY (CC, No, Date): JP 947094 940126

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G06K-009/62

ABSTRACT WORD COUNT: 176

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200030	1229
CLAIMS B	(German)	200030	1160
CLAIMS B	(French)	200030	1393
SPEC B	(English)	200030	9128
Total word count - document A			0
Total word count - document B			12910
Total word count - documents A + B			12910

INTERNATIONAL PATENT CLASS: G06K-009/62

19/3,K/4 (Item 4 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00684454

**A system and method for automatic handwriting recognition with a
writer-independent chirographic label alphabet**

**Anlage und Verfahren zur automatischen Handschrifterkennung mittels eines
benutzerunabhängigen chirographischen Labelalphabets**

**Systeme et methode pour la reconnaissance automatique d'écriture manuscrite
avec un alphabet a label chirographique independant des utilisateurs**

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,

Armonk, N.Y. 10504, (US), (Proprietor designated states: all)
INVENTOR:
 Bellegarda, Eveline Jeannine, 490 Boulder Lane, Goldens Bridge, New York 10526, (US)
 Bellegarda, Jerome Rene, 490 Boulder Lane, Goldens Bridge, New York 10526, (US)
 Nahamoo, David, 12 Elmwood Road, White Plains, New York 10605, (US)
 Nathan, Krishna Sundaram, 220 Madison Ave., Apt. 11Q, New York, New York 10016, (US)
LEGAL REPRESENTATIVE:
 Schafer, Wolfgang, Dipl.-Ing. (62021), IBM Deutschland Informationssysteme GmbH Patentwesen und Urheberrecht, 70548 Stuttgart, (DE)
PATENT (CC, No, Kind, Date): EP 654755 A1 950524 (Basic)
 EP 654755 B1 000802
APPLICATION (CC, No, Date): EP 94116631 941021;
PRIORITY (CC, No, Date): US 156335 931123
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06K-009/68
ABSTRACT WORD COUNT: 183
NOTE:
 Figure number on first page: 6

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200031	1670
CLAIMS B	(German)	200031	1598
CLAIMS B	(French)	200031	1936
SPEC B	(English)	200031	6741
Total word count - document A			0
Total word count - document B			11945
Total word count - documents A + B			11945

INTERNATIONAL PATENT CLASS: G06K-009/68

19/3,K/5 (Item 5 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
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00657597
Handwritten symbol recognizer and method for recognising handwritten symbols
Vorrichtung und Verfahren zum Erkennen handgeschriebener Symbole
Dispositif et methode de reconnaissance de symboles manuscrits
PATENT ASSIGNEE:
 MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington 98052-6399, (US), (applicant designated states: DE;FR;GB)
INVENTOR:
 Dai, Xiwei, 13440 SE 24th Street, Bellevue, Washington 98005, (US)
LEGAL REPRESENTATIVE:
 Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721), Maximilianstrasse 58, 80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 632403 A3 960320 (Basic)
 EP 632403 B1 990317
APPLICATION (CC, No, Date): EP 94110008 940628;
PRIORITY (CC, No, Date): US 86333 930630
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: G06K-009/48 ; G06K-009/68
ABSTRACT WORD COUNT: 318
LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9911	1785
CLAIMS B	(German)	9911	1626
CLAIMS B	(French)	9911	1952
SPEC B	(English)	9911	6915
Total word count - document A			0
Total word count - document B			12278
Total word count - documents A + B			12278

INTERNATIONAL PATENT CLASS: G06K-009/48 ...

... G06K-009/68

...SPECIFICATION points 34c and 34d and reference vector 7 was produced between coordinate point 34d and coordinate point 34e.

Because the **stroke** section from coordinate point 34e to coordinate point 34f returned to vertical alignment, it may be that the...

...determine whether it should be considered an unintentional anomaly. This is accomplished by counting the **number** of reference vectors in the anomalous portion (2 reference vectors) and dividing that **number** by the total **number** of reference vectors for the entire stroke between coordinate points 34a and 34g. The result...

19/3,K/6 (Item 6 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
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00646281

Hybrid on-line handwriting recognition and optical character recognition system.

Hybride Anlage mit Online Handschrifterkennung und optische Zeichenerkennung.

Systeme hybride avec reconnaissance d'écriture manuscrite online et reconnaissance optique de caracteres.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Fujisaki, Tetsunosuke, 4 Wayne Valley Road, Armonk, New York 10504, (US)
 Modlin, William David, 255 Northeast 20th Street, Boca Raton, Florida 33431, (US)

Mohiuddin, Kottappuram M., 1086 Quail Creek Circle, San Jose, California 95120-4167, (US)

Takahashi, Hiroyasu, 7-303 533 Kamoshida-cho, Midori-ku, Yokohma, (JP)

LEGAL REPRESENTATIVE:

Schafer, Wolfgang, Dipl.-Ing. (62021), IBM Deutschland Informationssysteme GmbH Patentwesen und Urheberrecht, D-70548 Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 624853 A2 941117 (Basic)
 EP 624853 A3 950222

APPLICATION (CC, No, Date): EP 94105890 940415;

PRIORITY (CC, No, Date): US 61495 930512

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/68 ; G06K-009/22

ABSTRACT WORD COUNT: 173

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	1091
SPEC A	(English)	EPABF2	4896
Total word count - document A			5989
Total word count - document B			0
Total word count - documents A + B			5989

INTERNATIONAL PATENT CLASS: G06K-009/68 ...

... G06K-009/22

...SPECIFICATION from the output of the digitizer tablet 12 and processes this dynamic information, such as **stroke numbers** and **stroke direction**, to obtain a list of most probable characters, or candidate characters, that the input stroke or strokes represent. The on-line HWR sub-system may be embodied by a **number** of suitable on-line HWR apparatus and methods. One suitable on-line HWR technique is...

19/3,K/7 (Item 7 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
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00623824

Automatic handwriting recognition using both static and dynamic parameters
Automatische Zeichenerkennung mit Verwendung statischer und dynamischer Parameter

Reconnaissance automatique de caracteres, utilisant des parametres statiques et dynamiques

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (Proprietor designated states: all)

INVENTOR:

Bellegarda, Jerome Rene, 490 Boulder Lane, Goldens Bridge, New York 10526, (US)

Nahamoo, David, 12 Elmwood Road, White Plains, New York 10605, (US)

Nathan, Krishna Sundaram, 220 Madison Avenue Apt. 11Q, New York, New York 10016, (US)

LEGAL REPRESENTATIVE:

Teufel, Fritz, Dipl.-Phys. et al (11855), IBM Deutschland Informationssysteme GmbH, Patentwesen und Urheberrecht, 70548 Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 608708 A2 940803 (Basic)
 EP 608708 A3 950329
 EP 608708 B1 000503

APPLICATION (CC, No, Date): EP 94100357 940112;

PRIORITY (CC, No, Date): US 9515 930127

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/22 ; G06K-009/68

ABSTRACT WORD COUNT: 196

NOTE:

Figure number on first page: 3

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200018	1603
CLAIMS B	(German)	200018	1560
CLAIMS B	(French)	200018	1996

SPEC B (English) 200018 7923
Total word count - document A 0
Total word count - document B 13082
Total word count - documents A + B 13082

INTERNATIONAL PATENT CLASS: G06K-009/22 ...
... G06K-009/68

...SPECIFICATION one stroke and a '5' that is formed with two strokes, by virtue of the **number** of **strokes** and/or the **direction** of pen movement.

However, a handwriting recognition system that is dependent solely upon stroke order...

19/3,K/8 (Item 8 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00591012

Method and apparatus for displaying characters
Verfahren und Vorrichtung zur Anzeige von Zeichen
Methode et dispositif pour la presentation de caracteres
PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo, (JP), (Proprietor designated states: all)

INVENTOR:

Arai, Tsunekazu, c/o Canon Kabushiki Kaisha, 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo 146, (JP)

Sakaguchi, Katsuhiko, c/o Canon Kabushiki Kaisha, 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo 146, (JP)

Mori, Shigeki, c/o Canon Kabushiki Kaisha, 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo 146, (JP)

Matsubayashi, Kazuhiro, c/o Canon Kabushiki Kaisha, 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo 146, (JP)

Harada, Takashi, c/o Canon Kabushiki Kaisha, 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo 146, (JP)

Takasu, Eiji, c/o Canon Kabushiki Kaisha, 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo 146, (JP)

Yoshii, Hiroto, c/o Canon Kabushiki Kaisha, 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo 146, (JP)

LEGAL REPRESENTATIVE:

Leson, Thomas Johannes Alois, Dipl.-Ing. et al (78983), c/o TBK-Patent, P.O. Box 20 19 18, 80019 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 585944 A2 940309 (Basic)
EP 585944 A3 941207
EP 585944 B1 021211

APPLICATION (CC, No, Date): EP 93114158 930903;

PRIORITY (CC, No, Date): JP 92236806 920904; JP 92243481 920911; JP 92246495 920916; JP 92246499 920916; JP 92246500 920916; JP 92246501 920916

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G06K-009/64 ; G06K-009/03

ABSTRACT WORD COUNT: 37

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	1236

CLAIMS B	(English)	200250	735
CLAIMS B	(German)	200250	619
CLAIMS B	(French)	200250	792
SPEC A	(English)	EPABF2	25238
SPEC B	(English)	200250	24624
Total word count - document A			26478
Total word count - document B			26770
Total word count - documents A + B			53248

INTERNATIONAL PATENT CLASS: G06K-009/64 ...

... G06K-009/03

...SPECIFICATION as information of pen down and pen up, it is possible to determine of which **stroke number** the **coordinate** point belongs to a hand. Using this, the **handwriting** can be drawn by linearly connecting the **coordinate** points sequentially within the same **stroke** (1604).

The number of strokes for hand data is defined by counting how many times...as information of pen down and pen up, it is possible to determine of which **stroke number** the **coordinate** point belongs to a hand. Using this, the **handwriting** can be drawn by linearly connecting the **coordinate** points sequentially within the same **stroke** (1604).

The number of strokes for hand data is defined by counting how many times...as information of pen down and pen up, it is possible to determine of which **stroke number** the **coordinate** point belongs to a hand (called a stroke). Using this, the **handwriting** can be drawn by linearly connecting the **coordinate** points sequentially within the same **stroke** (1604). The **number** of strokes for hand data is defined by counting how many times the pen down...as information of pen down and pen up, it is possible to determine of which **stroke number** the **coordinate** point belongs to a hand. Using this, the **handwriting** can be drawn by linearly connecting the **coordinate** points sequentially within the same **stroke** (1604). The **number** of strokes for hand data is defined by counting how many times the pen down...

...SPECIFICATION the enlarged font of the character is first displayed in the font area (1602). The **number** of strokes of the character is displayed together with the font display (1603), which is accomplished by preparing for a data base for character standard stroke **number** 109 in which the standard stroke **number** is described for each character (1607), and retrieving the subject character. To reproduce the character ...

...as information of pen down and pen up, it is possible to determine of which **stroke number** the **coordinate** point belongs to a hand. Using this, the **handwriting** can be drawn by linearly connecting the **coordinate** points sequentially within the same **stroke** (1604).

The number of strokes for hand data is defined by counting how many times...as information of pen down and pen up, it is possible to determine of which **stroke number** the **coordinate** point belongs to a hand. Using this, the **handwriting** can be drawn by linearly connecting the **coordinate** points sequentially within the same **stroke** (1604).

The number of strokes for hand data is defined by counting how many times...as information of pen down and pen up, it is possible to determine of which **stroke number** the **coordinate** point belongs to a hand (called a stroke). Using this, the **handwriting** can be drawn by linearly connecting the **coordinate** points sequentially within the same **stroke** (1604). The **number** of strokes for hand data is defined by counting how many times the pen down...as information of pen down and pen up, it is possible to determine of which **stroke number** the

coordinate point belongs to a hand. Using this, the **handwriting** can be drawn by linearly connecting the **coordinate** points sequentially within the same **stroke** (1604). The **number** of strokes for hand data is defined by counting how many times the pen down...

19/3,K/9 (Item 9 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00564124

Methods and apparatus for evolving a starter set of handwriting prototypes into a user-specific set

Verfahren und Vorrichtung zum Weiterentwickeln einer Anfangssammlung von Handschriftprototypen zu einer anwender-spezifischen Sammlung

Methodes et dispositif pour transformer une collection initiale de prototypes d'écriture manuscrite en une collection spécifique a l'utilisateur

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE)

INVENTOR:

Chefalas, Thomas Edward, 7722 30th Street, Jackson Heights, N.Y. 11370, (US)

Tappert, Charles Carson, Beach Road, Ossining, N.Y. 10562, (US)

LEGAL REPRESENTATIVE:

Teufel, Fritz, Dipl.-Phys. et al (11855), IBM Deutschland Informationssysteme GmbH, Patentwesen und Urheberrecht, 70548 Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 565871 A2 931020 (Basic)
EP 565871 A3 940216
EP 565871 B1 990609

APPLICATION (CC, No, Date): EP 93104071 930312;

PRIORITY (CC, No, Date): US 868369 920414

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: G06K-009/62

ABSTRACT WORD COUNT: 218

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9923	1993
CLAIMS B	(German)	9923	1859
CLAIMS B	(French)	9923	2170
SPEC B	(English)	9923	6877
Total word count - document A			0
Total word count - document B			12899
Total word count - documents A + B			12899

INTERNATIONAL PATENT CLASS: G06K-009/62

...SPECIFICATION the writing that occurs from a pen-down to a pen-up condition of a **handwriting** input device. Symbols, such as letters of the alphabet and **numbers**, are assemblages of such strokes.

Many on-line, handwriting recognition systems employ curve matching methods...

...Jt. Conf. Pattern Recognition, pp. 813-815, November 1978; C.C. Tappert, "Adaptive on-line **handwriting** recognition", Proc. 7th Int. Conf.

Pattern Recognition, pp. 1004-1007, 1984; C.C. Tappert, "Speed...

...recognition", IBM Research Report RC 13228, October 1987; and T. Wakahara and M. Umeda, "Stroke- **number** and stroke-order free on-line character recognition by selective stroke linkage method", Proc. 4th ICTP, pp. 157-162, 1983. In general, the recognition accuracy of such prototype-based **handwriting** recognition systems is a function of the quality of the prototypes.

Many online, handwriting recognition...

...4th Int. Conf. Pattern Recognition, pp. 813-815, November 1978; C.C. Tappert, "Adaptive online **handwriting** recognition", Proc. 7th Int. Conf. Pattern Recognition, pp. 1004-1007, 1984. Such systems usually represent...

...by a single prototype that usually is one writing of the character. This minimizes the **number** of prototypes and therefore the computation time for matching.

The recognition system of T. Fujisaki...

...forms of the letter "A" prototype may also be provided to cover different variations in **stroke** order and **direction**. As can be realized, if a given user consistently forms the letter "A" with three strokes, and consistently uses the same **stroke** order and **direction**, then the alternate "A" symbol starter prototypes are superfluous.

It is thus an object of...

19/3,K/10 (Item 10 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00544819

Character recognition method & apparatus

Verfahren und Gerat zur Zeichenerkennung

Methode et appareil de reconnaissance de caracteres

PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku, Tokyo, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Arai, Tsunekazu, c/o Canon Kabushiki Kaisha, 3-30-2 Shimomaruko, Ohta-ku, Tokyo, (JP)

Sakaguchi, Katsuhiko, c/o Canon Kabushiki Kaisha, 3-30-2 Shimomaruko, Ohta-ku, Tokyo, (JP)

Mori, Shigeki, c/o Canon Kabushiki Kaisha, 3-30-2 Shimomaruko, Ohta-ku, Tokyo, (JP)

Matsubayashi, Kazuhiro, c/o Canon Kabushiki Kaisha, 3-30-2 Shimomaruko, Ohta-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. 2-5 Warwick Court High Holborn, London WC1R 5DJ, (GB)

PATENT (CC, No, Kind, Date): EP 538038 A2 930421 (Basic)

EP 538038 A3 930908

EP 538038 B1 990421

APPLICATION (CC, No, Date): EP 92309421 921015;

PRIORITY (CC, No, Date): JP 91267378 911016

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/00 ; G06K-009/68 ; G06K-009/80

ABSTRACT WORD COUNT: 135

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9916	791
CLAIMS B	(German)	9916	657
CLAIMS B	(French)	9916	899
SPEC B	(English)	9916	3789
Total word count - document A			0
Total word count - document B			6136
Total word count - documents A + B			6136

INTERNATIONAL PATENT CLASS: G06K-009/00 ...

... G06K-009/68 ...

... G06K-009/80

...SPECIFICATION hand writing).

FIG. 7 is a diagram illustrating a matrix of analogy 60, in the direction of directional vector 2, between strokes of an unknown character, here the character shown in FIG. 6 and strokes of a standard pattern in the character dictionary. is input. Numerals 1, 3, 4, 7 and 8 correspond to the stroke numbering shown in FIG. 6 and indicate the sequence of hand writing at the input operation. Numerals 21, 22, 23, 24 and 25 correspond to stroke numbering of the standard pattern, for example, numeral 21 indicates the 1st data of directional vector 2. The symbol 0 represents the maximum analogous...

19/3,K/11 (Item 11 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2004 European Patent Office. All rts. reserv.

00527316

Improving on-line handwriting recognition using a prototype confusability dialogue.

Verbesserung der on-line-Handschrifterkennung durch Verwendung eines Prototypenverwechslungsgradsdialogs.

Perfectionnement de la reconnaissance en-ligne d'écriture manuscrite, utilisant un dialogue concernant la tendance à confondre des prototypes.

PATENT ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES CORPORATION, (200123), , Armonk, NY 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Fujisaki, Tetsunosuke, 4 Wayne Valley Road, Armonk, N.Y. 10504, (US)

Kim, Joonki, 6 Macy Avenue, White Plains, N.Y. 10605, (US)

Leibman, George Joseph, 100 Diplomat Drive, Apt. 6F, Mt. Kisco, N.Y. 10549, (US)

Tappert, Charles Carson, Beach Road, Ossining, N.Y. 10562, (US)

LEGAL REPRESENTATIVE:

Schafer, Wolfgang, Dipl.-Ing. (62021), IBM Deutschland Informationssysteme GmbH Patentwesen und Urheberrecht, D-70548 Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 539739 A2 930505 (Basic)
EP 539739 A3 940223

APPLICATION (CC, No, Date): EP 92116605 920929;

PRIORITY (CC, No, Date): US 785735 911031

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/62 ; G06K-009/03

ABSTRACT WORD COUNT: 56

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1429
SPEC A	(English)	EPABF1	3273
Total word count - document A			4702
Total word count - document B			0
Total word count - documents A + B			4702

INTERNATIONAL PATENT CLASS: G06K-009/62 ...

... G06K-009/03

...SPECIFICATION distinct way of writing a character (or recognition strategies that handle variation). With on-line **handwriting** , this includes variations in the **number** , order, **direction** , and shape of the **strokes** of a character. A stroke is the writing from pen-down to pen-up.
(2...

19/3,K/12 (Item 12 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00526838

Elastic prototype averaging in online handwriting recognition.
Elastische Prototypenmittelwertbildung bei On-line-Handschrifterkennung.
Prise en moyenne elastique de prototypes pour la reconnaissance en-ligne d'écriture manuscrite.

PATENT ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES CORPORATION, (200125), Old Orchard Road,
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Tappert, Charles Carson, Beach Road, Ossining, N.Y. 10562, (US)
, , ()

LEGAL REPRESENTATIVE:

Schafer, Wolfgang, Dipl.-Ing. (62021), IBM Deutschland
Informationssysteme GmbH Patentwesen und Urheberrecht, D-70548
Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 540869 A2 930512 (Basic)
EP 540869 A3 940223

APPLICATION (CC, No, Date): EP 92116073 920919;

PRIORITY (CC, No, Date): US 782215 911024

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/62

ABSTRACT WORD COUNT: 95

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	593
SPEC A	(English)	EPABF1	2627
Total word count - document A			3220
Total word count - document B			0
Total word count - documents A + B			3220

INTERNATIONAL PATENT CLASS: G06K-009/62

...SPECIFICATION Jt. Conf. Pattern Recognition, pp. 813-815, November 1978;

C.C. Tappert, "Adaptive on-line **handwriting** recognition", Proc. 7th Int. Conf. Pattern Recognition, pp. 1004-1007, 1984; C.C. Tappert, "Speed ...

...character recognition", IBM Research Report RC13228, October 1987; and T. Wakahara and M. Umeda, "Stroke- **number** and stroke-order free on-line character recognition by selective stroke linkage method", Proc. 4th ICTP, pp. 157-162, 1983. In general, the recognition accuracy of such prototype-based **handwriting** recognition systems is a function of the quality of the prototypes.

Many online, handwriting recognition...

...4th Int. Conf. Pattern Recognition, pp. 813-815, November 1978; C.C. Tappert, "Adaptive online **handwriting** recognition", Proc. 7th Int. Conf. Pattern Recognition, pp. 1004-1007, 1984. Such systems usually represent...

...by a single prototype that usually is one writing of the character. This minimizes the **number** of prototypes and therefore the computation time for matching.

The recognition system of T. Fijisaki...

19/3,K/13 (Item 13 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00512725

Method and apparatus for improving prototypes of similar characters in on-line handwriting recognition.

Verfahren und Gerat zur Verbesserung von Prototypen von ahnlichen Zeichen bei On-Line-Handschrifterkennung.

Methode et appareil de perfectionnement de prototypes de caracteres similaires lors de la reconnaissance d'ecriture manuscrite en-ligne.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Kim, Joonki, 6 Macy Avenue, White Plains, N.Y. 10605, (US)

Leibman, George Joseph, 100 Diplomat Drive, Mt. Kisco, N.Y. 10549, (US)

Tappert, Charles Carson, Beach Road, Ossining, N.Y. 10562, (US)

LEGAL REPRESENTATIVE:

Schafer, Wolfgang, Dipl.-Ing. (62021), IBM Deutschland

Informationssysteme GmbH Patentwesen und Urheberrecht, D-70548

Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 503250 A2 920916 (Basic)

EP 503250 A3 940223

APPLICATION (CC, No, Date): EP 92101264 920127;

PRIORITY (CC, No, Date): US 667917 910311

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/62 ; G06K-009/22

ABSTRACT WORD COUNT: 190

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	653
SPEC A	(English)	EPABF1	2613
Total word count - document A			3266
Total word count - document B			0

Total word count - documents A + B 3266

INTERNATIONAL PATENT CLASS: G06K-009/62 ...

... G06K-009/22

...SPECIFICATION Jt. Conf. Pattern Recognition, pp. 813-815, November 1978;
C.C. Tappert, "Adaptive on-line **handwriting** recognition," Proc. 7th
Int. Conf. Pattern Recognition, pp. 1004-1007, 1984; C.C. Tappert, "Speed
...
...character recognition," IBM Research Report RC13228, October 1987; and
T. Wakahara and M. Umeda, "Stroke- **number** and stroke-order free on-line
character recognition by selective stroke linkage method," Proc. 4th
ICTP, pp. 157-162, 1983. In general, the recognition accuracy of such
prototype-based **handwriting** recognition systems is a function of the
quality of the prototypes.
One problem encountered in...

19/3,K/14 (Item 14 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00468607

Robust prototype establishment in an on-line handwriting recognition system.

Robuste Ermittlung von Prototypen in einem On-line Handschrifterkennungssystem.

Etablissement de prototypes robuste dans une systeme de reconnaissance d'écriture manuscrite en-ligne.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,
Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

Chefalas, Thomas Edward, 77-22 30th Avenue, Jackson Heights, New York
11370, (US)

Fujisaki, Tetsunosuke, 4 Wayne Valley Road, Armonk, New York 10504, (US)

Kim, Joonki, 6 Macy Avenue, White Plains, New York 10605, (US)

Tappert, Charles Carson, Beach Road, Ossining, New York 10562, (US)

LEGAL REPRESENTATIVE:

Teufel, Fritz, Dipl.-Phys. et al (11855), IBM Deutschland
Informationssysteme GmbH, Patentwesen und Urheberrecht, 70548 Stuttgart
, (DE)

PATENT (CC, No, Kind, Date): EP 476393 A2 920325 (Basic)
EP 476393 A3 930721

APPLICATION (CC, No, Date): EP 91114595 910830;

PRIORITY (CC, No, Date): US 586843 900921

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/62

ABSTRACT WORD COUNT: 195

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1217
SPEC A	(English)	EPABF1	5177
Total word count - document A			6394
Total word count - document B			0
Total word count - documents A + B			6394

INTERNATIONAL PATENT CLASS: G06K-009/62

...SPECIFICATION method is described in an article entitled "On-line recognition of hand-written characters utilizing **positional** and **stroke** vector sequences" by K. Ikeda et al., Proc. 4th Int. Jt. Conf. Pattern Recognition, pp...
...stroke shape when matching input strokes to shapes in the dictionary and state that the **number** of strokes is a parameter for primary selection.
It is an object of the invention...

19/3,K/15 (Item 15 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00396876

Display device and display system incorporating such a device.

Anzeigegerat und Anzeigesystem mit einem solchen Gerat.

Ecran et systeme de visualisation incorporant un tel ecran.

PATENT ASSIGNEE:

HITACHI, LTD., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo 101, (JP), (applicant designated states: DE;FR;GB;IT;NL)

INVENTOR:

Kuzunuki, Soshiro, 3600-150 Nakane, Katsuta-shi Ibaraki 312, (JP)
Fukunaga,, 5-2 Mikanohara-cho 3-chome, Hitachi-shi Ibaraki 316, (JP)
Shojima, Hiroshi, 17-2 Moriyama-cho 3-chome, Hitachi-shi Ibaraki 316, (JP)
Miura, Masaki, 7-16 Higashioonuma-cho 3-chome, Hitachi-shi Ibaraki 316, (JP)
Yokota, Toshimi, 17-2-304 Moriyama-cho 3-chome, Hitachi-shi Ibaraki 316, (JP)

LEGAL REPRESENTATIVE:

Calderbank, Thomas Roger et al (50122), MEWBURN ELLIS York House 23 Kingsway, London WC2B 6HP, (GB)

PATENT (CC, No, Kind, Date): EP 379336 A2 900725 (Basic)
EP 379336 A3 901017
EP 379336 B1 941214

APPLICATION (CC, No, Date): EP 90300446 900116;

PRIORITY (CC, No, Date): JP 897815 890118

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G06F-003/033; G06K-009/22

ABSTRACT WORD COUNT: 173

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPBBF1	1017
CLAIMS B	(English)	EPBBF1	636
CLAIMS B	(German)	EPBBF1	579
CLAIMS B	(French)	EPBBF1	711
SPEC A	(English)	EPBBF1	8483
SPEC B	(English)	EPBBF1	8683
Total word count - document A			9500
Total word count - document B			10609
Total word count - documents A + B			20109

...INTERNATIONAL PATENT CLASS: G06K-009/22

...SPECIFICATION C40 for the character display area of Fig. 10.

First it is determined whether the **stroke** start **coordinates** Ps are inputted in a square other than the same square (step C410). If it...

...same square, it is determined that a hand-written character is still being inputted and **stroke data (coordinate values)** are transferred to the external computer 6 through the code interface 43. **Handwriting** is displayed on the WS screen (cf. Fig. 11), and the stroke data is stored...

...SPECIFICATION C40 for the character display area of Fig. 10.

First it is determined whether the **stroke start coordinates** Ps are inputted in a square other than the same square (step C410). If it...

...same square, it is determined that a hand-written character is still being inputted and **stroke data (coordinate values)** are transferred to the external computer 6 through the code interface 43. **Handwriting** is displayed on the WS screen (cf. Fig. 11), and the stroke data is stored...

19/3,K/16 (Item 16 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00160628

Method and apparatus for recognizing and displaying handwritten characters and figures.

Verfahren und Anlage zum Erkennen und Anzeigen handgeschriebener Zeichen und Figuren.

Procede et dispositif de reconnaissance et affichage de caracteres et figures manuscrites.

PATENT ASSIGNEE:

HITACHI, LTD., (204144), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo 100, (JP), (applicant designated states: CH;DE;FR;GB;IT;LI;NL;SE)

INVENTOR:

Fukunaga, Yasushi, 17-2-503, Moriyamacho-3-chome, Hitachi-shi, (JP)
Kusunuki, Soshiro, 3600-150, Nakane, Katsuta-shi, (JP)
Shojima, Hiroshi, Yuhoryo, 20-3 Ayukawacho-6-chome, Hitachi-shi, (JP)
Yokoyama, Takanori, Yuhoryo, 20-3 Ayukawacho-6-chome, Hitachi-shi, (JP)
Koga, Kazuyoshi, Yuhoryo, 20-3 Ayukawacho-6-chome, Hitachi-shi, (JP)
Hirasawa, Kotaro, 10-7, Kanesawacho-7-chome, Hitachi-shi, (JP)
Kawada, Shinichi, 1382-8, Arajukucho, Hitachiota-shi, (JP)

LEGAL REPRESENTATIVE:

Patentanwalte Beetz - Timpe - Siegfried Schmitt-Fumian - Mayr (100712)
, Steinsdorfstrasse 10, D-80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 156394 A2 851002 (Basic)

EP 156394 A3 880831

EP 156394 B1 930714

APPLICATION (CC, No, Date): EP 85103823 850329;

PRIORITY (CC, No, Date): JP 8460717 840330

DESIGNATED STATES: CH; DE; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: G06K-009/22

ABSTRACT WORD COUNT: 123

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	516
CLAIMS B	(German)	EPBBF1	452
CLAIMS B	(French)	EPBBF1	597
SPEC B	(English)	EPBBF1	3736
Total word count - document A			0

Total word count - document B 5301
Total word count - documents A + B 5301

INTERNATIONAL PATENT CLASS: G06K-009/22

...CLAIMS receives stroke information from said input means (3);
- sending the result of the recognition, the **number** of strokes having been used for the recognition, and the **number** of **position coordinates** included in said **strokes** to processing means (4), when said recognition processing is completed;
- erasing only stroke information having...

19/3,K/17 (Item 17 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00788833 **Image available**

IDENTITY AUTHENTICATION SYSTEM AND METHOD
SYSTEME ET PROCEDE D'AUTHENTIFICATION D'IDENTITE

Patent Applicant/Inventor:

BLACK Gerald R, 30590 Southfield Road, Suite 160, Southfield, MI 48076,
US, US (Residence), US (Nationality)

Patent and Priority Information (Country, Number, Date):

Patent: WO 200122351 A1 20010329 (WO 0122351)

Application: WO 2000US19652 20000718 (PCT/WO US0019652)

Priority Application: US 99154590 19990917; US 99163433 19991103; US
2000177390 20000120; US 2000490687 20000124; US 2000535411 20000324; US
2000207892 20000525

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 15766

Main International Patent Class: G06K-009/00

Fulltext Availability:

Claims

Claim

... of millions of other people. It is not practical to have the driver search such **numbers** of records for each transaction. The primary identifier in a conventional credit card transaction is...

...birthday (6 digit code), zip code, PIN, or printed name. There is a preference for **numerical** data because of language and translation problems, since Arabic **numbering** is essentially the global standard.

Certain basic strategies are needed. Since the fingerprints enable 28...

...improved composite of the user's prints for subsequent transactions. In one preferred embodiment, a **numerical** is used (see FIGURE 10) to

streamline the confirmation process. The user enters a zip...registration so that credit histories can be properly accessed and analyzed; and Prepaid or stored **value** type of transactions where the user has deposited an amount of money for subsequent use...

...present invention-, the exact identity of the user can be withheld in prepaid or stored- **value** transactions. In one preferred embodiment of the present invention, the stylus 15 includes an on...

...not the primary concern; and (2) a stylus 15 without print sensors 20 for stored **value** or prepaid accounts. In yet another preferred embodiment, the print sensors 20 are incorporated in...Once read, the signals of the prints are transmitted for processing. The guest can add **value** to his/her account at terminals throughout the casino. The system enables a guest...the biometric of choice in the identity authentication system of the present invention 10 since **handwriting** and signatures change with time and with each writing such that a match with perfect...user by eliminating the need to carry all credit cards, debit cards, ATM cards, stored **value** cards, and pre-paid cards in a wallet or purse. As shown in FIGURE 2A...

...new bank account. An application provides the financial institution with basic information - name, address, phone **number** , and signature. The only difference is that a special stylus 15 is used that enables...fingerprint features by showing the coincidence of the minutiae features, taking into consideration the similarity, **number** , and unit relationship of the characteristics to each other. Searching and matching of fingerprints is...

...another pressure sensor to measure grip pressure; an accelerometer to the stylus point to measure **stroke** speed; a gyroscope **positioned** at the top end of the stylus 15 to measure the angle of the stylus...authenticate identification to replace credit, debit cards and the like. The primary identifiers include phone **number** , name, area code or zip code. The system performs the initial search based upon the...

...Once read, the signals of the prints are transmitted for processing. The guest can add **value** to his/her account at terminals throughout the casino complex. When one uses a stylus...applications involving the matching of prints of the guest requesting access as against a limited **number** of authorized entrants (guest room access) and those applications where the prints of the guest requesting access are compared against a large **number** of guests in the system (slot and table play in a casino). While both instances...

...caller ID where the user receiving the incoming call can read the caller's phone **number** before answering the call. If the caller uses the engagement member of the present invention...is read. However, keyboard sensors can be useful in instances where the caller's phone **number** is read and there are only a limited **number** of people authorized from that **number** as with a modem. Also, keyboard sensors can be used in combination with PIN's...

DIALOG(R)File 349:PCT FULLTEXT
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00357163 **Image available**

**METHOD AND APPARATUS FOR CHARACTER RECOGNITION OF HAND-WRITTEN INPUT
PROCEDE ET APPAREIL DE RECONNAISSANCE DE CARACTERES D'UNE ENTREE MANUSCRITE**

Patent Applicant/Assignee:

MOTOROLA INC,

Inventor(s):

PARTHASARATHY Kannan,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9639677 A1 19961212

Application: WO 96US5884 19960426 (PCT/WO US9605884)

Priority Application: US 95465502 19950605

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AU CA CN JP KR SG AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 6924

Main International Patent Class: G06K-009/18

Fulltext Availability:

Detailed Description

Detailed Description

... handwritten input(20), or
raw input data, i.e. sequence of (x,y,pen) (104) values into a
sequence of "strokes." In accordance with the present
invention a "stroke" is defined point of the stroke, my
is the y coordinate of the mid point of the stroke, len is the
length of the straight line...module is descibed in related
U.S. patent application entitled METHOD AND MICROPROCESSOR
FOR PREPROCESSING HANDWRITING HAVING CHARACTERS
COMPOSED OF A PREPONDERANCE OF STRAIGHT LINE
SEGEMENTS filed concurrently, and on the same day as the
5 present application, having U.S. serial number (yet to be
determined.)
In the preferred method and embodiment of the present
invention, the...

19/3,K/19 (Item 19 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00305865

**VECTOR QUANTIZATION WITH LOW DATA DIMENSIONALITY FOR HANDWRITING RECOGNIZER
QUANTIFICATION VECTORIELLE A FAIBLE DIMENTIONNEMENT DES DONNEES APPLIQUEE A
LA RECONNAISSANCE DE L'ECRITURE MANUSCRITE**

Patent Applicant/Assignee:

APPLE COMPUTER INC,

Inventor(s):

GRAJSKI Kamil A,

CHOW Yen-Lu,

LEE Kai-Fu,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9524016 A1 19950908

Application: WO 95US2167 19950301 (PCT/WO US9502167)

Priority Application: US 94204031 19940301

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR
KZ LK LR LT LU LV MD MG MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK TJ
TT UA UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT
SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 13304

Main International Patent Class: G06K-009/62

Fulltext Availability:

Claims

Claim

... of segments using said
y-velocity series, each one of said segments having an x- coordinate in
said stroke
data; and
reordering said segments based on said x-coordinates to create a
series of...

19/3,K/20 (Item 20 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00259050 **Image available**

METHOD AND APPARATUS FOR RECOGNIZING CURSIVE WRITING FROM SEQUENTIAL INPUT
INFORMATION

PROCEDE ET APPAREIL PERMETTANT DE RECONNAITRE UNE ECRITURE CURSIVE A PARTIR
D'INFORMATIONS D'ENTREE SEQUENTIELLES

Patent Applicant/Assignee:

PARAGRAPH INTERNATIONAL,

Inventor(s):

GUBERMAN Shelja A,

LOSSEV Ilia,

PASHINTSEV Alexander V,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9407214 A1 19940331

Application: WO 93US8024 19930826 (PCT/WO US9308024)

Priority Application: US 92954351 19920924

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

DE GB JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 9579

Main International Patent Class: G06K-009/00

Fulltext Availability:

Claims

Claim

... claim 1, wherein said
constructing step comprises dynamic programming said word
correlation tables based on stroke order and stroke position
relative to a baseline,
3* A method for recognizing cursive handwritten WO 94/07214 9
PCr/US93/08024
receiving input signals having values representative

of a sequence of points symbolizing **handwriting** and of a beginning point and of an ending point of said sequence of points...

...candidate word;
constructing word correlation tables by dynamic programming said word correlation tables based on **stroke** order and **stroke position** relative to a baseline using a feature correlation table of all metastrokes forming a vocabulary...

19/3,K/21 (Item 21 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00182562

OBJET RECOGNITION SYSTEM
SYSTEME DE RECONNAISSANCE D'OBJETS

Patent Applicant/Assignee:
GRID SYSTEMS CORPORATION,

Inventor(s):

HAWKINS Jeffrey C,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9016042 A1 19901227

Application: WO 90US3261 19900608 (PCT/WO US9003261)

Priority Application: US 89153 19890616

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AT AU BE CH DE DK ES FI FR GB IT JP KR LU NL SE SU

Publication Language: English

Fulltext Word Count: 3994

Main International Patent Class: G06K-009/00

Fulltext Availability:

Detailed Description

Detailed Description

... differentiate between dictionary entries.

.0

In the above example, each feature was related to the **number** of occurrences (or lack of occurrences) of a particular **number** of inflections. However, features do not necessarily encode the **number** of times a particular attribute occurs. For example, a useful attribute is the **direction** of a **stroke**, Features relating to this attribute are whether the **stroke direction** is **north**, **south**, **east**, or **west**, and thus are unrelated to **number** of occurrences,
Building and Revising the Dictionar
Building a dictionary utilizing the system
described is a straightforward process. In the case of **handwriting** recognition, for example, **handwriting** samples from several people are gathered and a set of features deemed useful for recognizing...

?

20/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00880924 **Image available**

PORTABLE OPERATING ENVIRONMENT FOR INFORMATION DEVICES
ENVIRONNEMENT D'EXPLOITATION TRANSFERABLE POUR DISPOSITIFS D'INFORMATIONS

Patent Applicant/Assignee:

TRANSVIRTUAL TECHNOLOGIES INC, 188 The Embarcadero, San Francisco, CA
94105, US, US (Residence), US (Nationality)

Inventor(s):

WILKINSON Tim , 1125 Oxford Street, Berkeley, CA 94707, US,
MEHLITZ Peter , 1725 Arlinton Blvd., El Cerrito, CA 94530, US,
FADER Tony, 524 - 37th Avenue, Santa Cruz, CA 95062, US

Legal Representative:

SMITH Andrew V (agent), Sierra Patent Group, Ltd., P.O. Box 6149,
Stateline, NV 89449, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200215004 A2-A3 20020221 (WO 0215004)

Application: WO 2001US25632 20010814 (PCT/WO US01025632)

Priority Application: US 2000225569 20000814

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL
TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 19152

Inventor(s):

WILKINSON Tim ...

... **MEHLITZ Peter**

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... device with a rendering mechanism that supports explicitly set,
non-z-order implied clipping rectangles.

Handwriting recognition systems known in the art include the GRAFFITI
system, developed by Xerox, which is...

...which is used in - 3 WinCE (and others). It is desired to have an
improved **handwriting** recognition system, particularly for use with an
embedded computing device.

SUMMARY OF TBE INVENTION

A...and data used to factorize the way it is rendered preferably are
logically separated.

A **handwriting** recognition software program for use with an embedded
device is provided including an encoding module...

28/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01104264

PEN BASED EDIT CORRECTION INTERFACE METHOD

**VERFAHREN ZUR VERARBEITUNG UND KORREKTUR IN EINER GRIFFELUNTERSTUTZTEN
BENUTZERSCHNITTSTELLE**

PROCEDE D'INTERFACE DE CORRECTION D'EDITION A STYLET

PATENT ASSIGNEE:

Natural Input Solutions Inc., (2878370), 91 Tiago Avenue, Toronto,
Ontario M4B 2A4, (CA), (Proprietor designated states: all)

INVENTOR:

MAXTED, Sean, Kenneth, 91 Tiago Avenue, Toronto, Ontario M4B 2A4, (CA)

LEGAL REPRESENTATIVE:

Gray, James et al (94641), Withers & Rogers, Goldings House, 2 Hays Lane,
London SE1 2HW, (GB)

PATENT (CC, No, Kind, Date): EP 1145101 A2 011017 (Basic)
EP 1145101 A3 020828
EP 1145101 B1 030625
WO 99056198 991104

APPLICATION (CC, No, Date): EP 99915405 990423; WO 99CA325 990423

PRIORITY (CC, No, Date): US 82946 P 980424; US 113352 P 981221

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: G06F-003/00

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200326	1774
CLAIMS B	(German)	200326	1666
CLAIMS B	(French)	200326	2178
SPEC B	(English)	200326	17921
Total word count - document A			0
Total word count - document B			23539
Total word count - documents A + B			23539

...SPECIFICATION single-click or tap is a pen down followed by a pen up within a **pre - selected** interval of **time** , where the absolute distance between the initial pen down coordinate and all subsequent present pen down **coordinates** stays within a **stroke** tolerance **value** . A double-click consists of two consecutive single-clicks, where the absolute distance between the...

...initial pen down coordinate of the second single-click falls within a double click tolerance **value** and the pen down event of the second single click follows the pen up event of the first single-click within a **pre - selected** interval of **time** .

A point is defined as (X,Y) coordinate which represents the absolute position of the...

...a pre-selected interval of time. ASCII is the American Standard Code of Information Interchange.

Handwriting time-out refers to a logic sequence wherein after each stroke is completed (ie: the...

...ordered set of strokes (displayed on the computer screen as Electronic Ink) are recognized by **handwriting** recognition software as ASCII, the

- * Double-tap area (default value = "5 pixels") - Ability to adjust the area of double-tap from small to large.
- * Spell checking (default value = "Enable") - Allows user to enable or disable spell checking.
- * Tablet Settings (default value = "Non-Applicable") - Allows user the ability to adjust the IRQ, Address, etc..., settings.
- * Writing hand (default value = "Right") - Left or Right writing hand.
- * Menu Style (default value = "Right") - Left or Right menus.
- * Reset settings to default values (default value = "Non-Applicable") - Single-click on Restore Defaults Command Button (not shown in diagrams).
- * **Handwriting Recognition Accuracy** (default value = "Balanced") - User can increase or decrease **Handwriting Recognition Accuracy** by using a sliding scale that moves from "Less Accurate" to "Balanced" to "More Accurate". *Note* Increasing **Handwriting Recognition Accuracy**, increases the interval of time required for **Handwriting** to be recognized. Therefore, the user must strike a balance between the desired **Handwriting Recognition Accuracy** and the desired interval of time required for **Handwriting** to be recognized.

Referring to figures 21a through 21u, a number of initial steps are... The user may select a block of text and replace it with text interpreted by **handwriting** recognition software. The user may move the cursor. The user may select a block of...

...the user did not write a first stroke edit symbol, the stroke is treated as **handwriting** and the system continues to store and display the order sets of points 255 (figure 211) until there is a **handwriting** time out, that is until the pen is not down 257 for longer than a preselected time 259. The strokes are then sent to the **handwriting** recognition unit 261. If there is no block of text selected 263 the results are...230. If there was not a first stroke edit symbol the system goes to the **handwriting** analysis described above. On the other hand if the user keeps the pen in place...

...in Punctuation, Selection and Edit mode, by adding, deleting, or modifying existing models (eg: Stored **handwriting** samples) of these specialty symbols. In addition, the system allows a user to improve recognition...

...CLAIMS claim 2 wherein the input mode is chosen from the group consisting of dictation and **handwriting**.

19. A method for performing edit correction as claimed in claim 18 wherein activating the **handwriting** input mode includes the steps of determining if ...wherein the plurality of text input attribute Icons are chosen from the group consisting of **handwriting** bitmap icon (74), dictionary icon (80), speech icon (76), playback icon (86), keyboard icon (78...

28/3,K/2 (Item 2 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
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00777807

Handwritten character recognition apparatus with an improved feature of correction to stroke segmentation and method for correction to stroke segmentation for recognition of handwritten character

Gerat zur Handschrifterkennung, gekennzeichnet durch eine verbesserte Korrektur der Strichsegmentation und Verfahren zur Korrektur der Strichsegmentation fur Handschrifterkennung

Appareil de reconnaissance de caracteres manuscrits caracterise par une correction amelioree de la segmentation des traits et methode pour la correction de la segmentation des traits pour la reconnaissance de caracteres manuscrits

PATENT ASSIGNEE:

NEC CORPORATION, (236690), 7-1, Shiba 5-chome, Minato-ku, Tokyo, (JP),
(Proprietor designated states: all)

INVENTOR:

Ikebata, Yoshikazu, c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Baronetzky, Klaus, Dipl.-Ing. et al (57481), Splanemann Reitzner
Baronetzky Westendorp Patentanwälte Rumfordstrasse 7, 80469 München, (DE)

PATENT (CC, No, Kind, Date): EP 727754 A2 960821 (Basic)
EP 727754 A3 970502
EP 727754 B1 020306

APPLICATION (CC, No, Date): EP 95120572 951227;

PRIORITY (CC, No, Date): JP 94327473 941228

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/22

ABSTRACT WORD COUNT: 188

NOTE:

Figure number on first page: 3

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	2956
CLAIMS B	(English)	200210	2790
CLAIMS B	(German)	200210	2605
CLAIMS B	(French)	200210	2895
SPEC A	(English)	EPAB96	6299
SPEC B	(English)	200210	3015
Total word count - document A			9257
Total word count - document B			11305
Total word count - documents A + B			20562

INTERNATIONAL PATENT CLASS: G06K-009/22

...SPECIFICATION 1 is provided for input of strokes, wherein one stroke is defined as a continuous **handwriting** line drawn from a pen-down to a pen-up, where the pen-down means...end time T_e of the stroke S . Subsequently, the position-detecting section 3 compares the **time** difference with the **predetermined value**. If the **time** difference is smaller than the **predetermined value**, then it is recognized that the input operation of one character is not yet completed...

...section 4. On the other hand, if the time difference is larger than the **predetermined value**, then it is recognized that the input operation of one character is not yet completed and then it enters into a step S12. In the step S12, the **position**-detecting section 3 fetches any **strokes** already stored in the stroke memory section 4 to recognize the fetched stroke as a character stroke which constitutes a character alone or in combination with other **strokes**. The **position**-detecting section 3 sets the maximum and minimum **values** of X-Y coordinates of each of the stroke or strokes constituting the character so...

...SPECIFICATION 1 is provided for input of strokes, wherein one stroke is defined as a continuous **handwriting** line drawn from a pen-down to a

pen-up, where the pen-down means...end time Te of the stroke S. Subsequently, the position-detecting section 3 compares the **time** difference with the **predetermined value**. If the **time** difference is smaller than the **predetermined value**, then it is recognized that the input operation of one character is not yet completed...

...section 4. On the other hand, if the time difference is larger than the **predetermined value**, then it is recognized that the input operation of one character is not yet completed and then it enters into a step S12. In the step S12, the **position**-detecting section 3 fetches any **strokes** already stored in the stroke memory section 4 to recognize the fetched stroke as a character stroke which constitutes a character alone or in combination with other **strokes**. The **position**-detecting section 3 sets the maximum and minimum **values** of X-Y **coordinates** of each of the **stroke** or strokes constituting the character so as to set a circumscribing rectangular frame encompassing the...

28/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00419963

Multi-scale recognizer for hand drawn strokes.

Mehrere Skalen benutzende Erkennungsvorrichtung für handgeschriebene Striche.

Dispositif de reconnaissance de traits manuscrits en plusieurs echelles.

PATENT ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES CORPORATION, (200123), , Armonk, NY
10504, (US), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Lipscomb, James Sargent, 1646 Paine Street, Yorktown Heights, New York
10598, (US)

LEGAL REPRESENTATIVE:

Schafer, Wolfgang, Dipl.-Ing. (62021), IBM Deutschland
Informationssysteme GmbH Patentwesen und Urheberrecht, D-70548
Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 422403 A2 910417 (Basic)
EP 422403 A3 921202

APPLICATION (CC, No, Date): EP 90117622 900913;

PRIORITY (CC, No, Date): US 421211 891013

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: **G06K-009/36**

ABSTRACT WORD COUNT: 92

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1272
SPEC A	(English)	EPABF1	8012
Total word count - document A			9284
Total word count - document B			0
Total word count - documents A + B			9284

INTERNATIONAL PATENT CLASS: **G06K-009/36**

...SPECIFICATION HAND DRAWN STROKES

The invention relates to signal processing, and in particular is directed to **handwriting** recognition. Specifically, the invention is directed to a multi-scale recognizer for hand drawn strokes...

...rate. This class of technology is used for signature verifications, automatic drafting, graphics, character recognition, **handwriting** recognition and so forth. In each case, the user writes on the writing surface with...and then display some revised version of the stroke or some semantic result of the **stroke** input.

FIG. 11 shows a **flow** diagram overview of training new "multi-scale" recognizer strokes. Training is accomplished by storing different...

...shown graphically in FIG. 2 as "Filter 1", yielding S1, a version of the input **stroke** with fewer **xy** points than the original. This extraction is explained in detail in FIG. 12. S2 through...

...used to extract Si, where i will be successively two through four. At the same **time** the **limit** is **set** to one. This controls how many of the Si's are saved in the table...

...ultimately is 3, so that only S1 through S3 are stored in the table. High- **numbered** Si's that do not differ from each other are not stored in order to...

...extracted, as shown in block 16, which is initially S2 and ultimately S4. If the **number** of line segments in Si is not the same, as tested in block 17, as the **number** of line segments in Si-1, then ilimit is set to i, as shown in...

...the table (right-pointing arrows in FIG. 2). This is done by starting with a **value** of 1 for i in block 21, storing Si as shown in block 22, and...

28/3,K/4 (Item 4 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
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00387725

Signature verification method

Unterschriftenprüfungsverfahren

Methode de verification de signatures

PATENT ASSIGNEE:

CADIX INC., (1198000), 2-26-15 Shinmachi, Setagaya-Ku, Tokyo 154, (JP),
 (applicant designated states: AT;CH;DE;ES;FR;GB;IT;LI;NL;SE)

INVENTOR:

Muroya, Masami, 2-24-6 Seta, Setagaya-ku, Tokyo 158, (JP)

LEGAL REPRESENTATIVE:

Heim, Hans-Karl, Dipl.-Ing. et al (49352), Weber & Heim Patentanwalte
 Irmgardstrasse 3, 81479 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 392159 A2 901017 (Basic)
 EP 392159 A3 920812
 EP 392159 B1 961030

APPLICATION (CC, No, Date): EP 90102809 900213;

PRIORITY (CC, No, Date): JP 8990443 890410

DESIGNATED STATES: AT; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: G06K-009/64 ; G06K-009/00

ABSTRACT WORD COUNT: 131

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	503
CLAIMS B	(English)	EPAB96	498

CLAIMS B	(German)	EPAB96	453
CLAIMS B	(French)	EPAB96	586
SPEC A	(English)	EPABF1	4004
SPEC B	(English)	EPAB96	3986
Total word count - document A			4507
Total word count - document B			5523
Total word count - documents A + B			10030

INTERNATIONAL PATENT CLASS: G06K-009/64 ...

... G06K-009/00

...SPECIFICATION thereof is defined as follows: (see image in original document)

The equation provides an optimum **value** based on the non-linear axial expansion/contraction. The following conditions are **set** to the **time** axis distortion function (i(1), j(1)) which represents the non-linear conversion.

(1) Monotonicity respect to the continuous **stroke -to- stroke coordinate** and writing pressure variations, the time axis distortion function has to be a continuous function...

28/3,K/5 (Item 5 from file: 348)
 DIALOG(R)File 348:EUROPEAN PATENTS
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00241456

Compensation for fine line prints.

Kompensation beim Drucken feiner Striche.

Compensation pour l'impression de lignes fines.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,
 Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Kantor, Sherwood (NMI), 4857 Fairlawn Circle, Boulder Colorado 80301,
 (US)

Selby, Garry Joe, 1634 Albion Lane, Longmont Colorado 80501, (US)

Wolfe, Larry Lance, 2919 West 11th Avenue Circle, Broomfield Colorado
 80020, (US)

LEGAL REPRESENTATIVE:

Schuffenecker, Thierry (69981), Compagnie IBM France, Departement de
 Propriete Intellectuelle, F-06610 La Gaude, (FR)

PATENT (CC, No, Kind, Date): EP 246457 A2 871125 (Basic)

EP 246457 A3 890823

EP 246457 B1 920708

APPLICATION (CC, No, Date): EP 87105871 870422;

PRIORITY (CC, No, Date): US 864985 860520

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G06K-015/12 ; G03G-015/00; H04N-001/40

ABSTRACT WORD COUNT: 178

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS B	(English)	EPBBF1	1552
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CLAIMS B	(German)	EPBBF1	892
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CLAIMS B	(French)	EPBBF1	968
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SPEC B	(English)	EPBBF1	5934
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Total word count - document A			0
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Total word count - document B 9346
Total word count - documents A + B 9346

INTERNATIONAL PATENT CLASS: G06K-015/12 ...

...SPECIFICATION black/white transitions) and gray stroke positions.

In connection with lines perpendicular to the scan **direction**, the **stroke** width of these lines can be controlled or widened by adding black at the white/black and black/white transitions. The amount of added black is a fractional pel **value** in accordance with **the** reference **signal** and can be selected to yield the desired stroke width. Black strokes in some machines are generated when the laser is turned off, and in that event in order to increase the stroke width the laser is turned off sooner and back on later than...

...by the raw print data (or the enhanced print data). Lines parallel to the scan **direction** are **controlled** in **stroke** width (or widened) by applying gray exposure **values** to the photoconductor. These gray exposure **values** are placed in pel areas adjacent to the black data and may be placed at both **the** white/black and **black** /white transitions. These gray exposure **values** are **generated** by duty cycle modulating the laser, **that** is the laser is turned off for a **period** of **time** shorter than the normal pel period. Conversely, the laser is turned on for a **period** of **time** shorter than the normal pel period. In either case the gray exposure signal is centered in **its** respective **pel** position (although other locations could also be used). Although termed a gray exposure, the **resulting** image has a reduced size black pel at the gray exposed locations.

As already mentioned, the location...

28/3,K/6 (Item 6 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00166864

A system for automatic adjustment and editing of handwritten text images.
Anlage fur automatische Auspassung und Aufbereitung handgeschriebener Textbilder.

Systeme pour ajustage et edition d'images de texte manuscrit.

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Fox, Abijah Shawhan, 400-C High Point Drive, Hartsdale New York 10530, (US)

Greanias, Evon Constantine, 4550 North Park Avenue, Chevy Chase Maryland 20815, (US)

Kim, Joonki, 6 Macy Avenue, White Plains New York 10605, (US)

Tappert, Charles Carson, Beach Road, Ossining New York 10562, (US)

LEGAL REPRESENTATIVE:

Killgren, Neil Arthur (32601), IBM United Kingdom Limited Intellectual Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 176715 A2 860409 (Basic)

EP 176715 A3 890322

EP 176715 B1 920715

APPLICATION (CC, No, Date): EP 85110144 850813;

PRIORITY (CC, No, Date): US 655174 840927

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G06F-015/66;

ABSTRACT WORD COUNT: 123

LANGUAGE (Publication,Procedural,Application): English; English; English
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1237
CLAIMS B	(German)	EPBBF1	1257
CLAIMS B	(French)	EPBBF1	1413
SPEC B	(English)	EPBBF1	7590
Total word count - document A			0
Total word count - document B			11497
Total word count - documents A + B			11497

...SPECIFICATION a system for providing full function electronic communication relative to hand prepared images such as **handwriting** and sketches together with key-entered text. In contemporary communications systems, a need exists to...

...accomplished with at least the same ease as in physically creating the data, i.e., **handwriting**. This functionality includes text and image recording, selective editing such as erasing, insertion and the...

...used to enter a series of handwritten strokes into an x-y tablet wherein the **strokes** are converted into **coordinate** signals, said series of **strokes** later being segmented into a series of words for display on a display screen, said system being characterised by: a stroke extremity detector to store current extremity **values** of a new stroke during a **period of time** when said input stylus is in contact with said tablet, the current extremity **values** being obtained from the maximum and minimum components of the **coordinate** signals corresponding to said **stroke**; a compare system for receiving said current extremity **values** and comparing same with old extremity **values** corresponding to a present word and obtained from a word extremity memory, so as to...

...said new stroke lies outside a predetermined zone of proximity derived from said old extremity **values**; wherein if said new stroke lies within said zone it is classed as forming part...

...used to enter a series of handwritten strokes into an x-y tablet wherein the **strokes** are converted into **coordinate** signals, said series of **strokes** later being segmented into a series of words for display on a display screen, said system being characterised by: a stroke extremity detector to store current extremity **values** of a new stroke during a **period of time** when said input stylus is in contact with said tablet, the current extremity **values** being obtained from the maximum and minimum components of the **coordinate** signals corresponding to said **stroke**; an alignment system for orientating words so that they are horizontal with respect to a...

...previous horizontal words; a word baseline determinator for receiving a current word consisting of a **number** of **strokes** with associated **coordinate** signals and calculating from the coordinate signals a baseline for said current word; a correcting...between consecutive words and lines of text to provide uniform spacing, correcting skew lines of **handwriting** (baseline drift correction) and presenting handwritten text in paragraphs reflecting the shape the user has...the writer does not follow a horizontal line across the page. As is well known, **handwriting** often runs either "uphill" or "downhill", in either case a deviation from the horizontal. An...the NCI images.

As shown in Figures 3, "h" is denoted as the height of **handwriting**. It may be assumed for English **handwriting** that "r" is approximately 0.5

of "h" while "l" is slightly less than 0.5 of "h" because **handwriting** progresses from left to right under normal conditions. Similarly, "d" can be established by inspection...

...different languages are employed. That is, the values described herein are usable for English language **handwriting**. However, if other languages are employed, the parameters would have to be suitably adjusted.

In...word would be to erase it. A characteristic "scratch-out" stroke which never occurs in **handwriting** may be reserved for such word deletion operations. This can be made, for example, by...

...CLAIMS to enter a series of handwritten strokes into an x-y tablet (80) wherein the **strokes** are converted into **coordinate** signals, said series of **strokes** later being segmented into a series of words for display on a display screen, said system being characterized by:

a stroke extremity detector (12) to store current extremity **values** of a new stroke during a **period** of **time** when said input stylus (84) is in contact with said tablet (80), the current extremity **values** being obtained from the maximum and minimum components of the **coordinate** signals corresponding to said **stroke** ;

a compare system (14) for receiving said current extremity **values** and comparing same with old extremity **values** corresponding to a present word and obtained from a word extremity memory (19), so as...

...said new stroke lies outside a predetermined zone of proximity derived from said old extremity **values** ;

wherein if said new stroke lies within said zone it is classed as forming part...

...to enter a series of handwritten strokes into an x-y tablet (80) wherein the **strokes** are converted into **coordinate** signals, said series of **strokes** later being segmented into a series of words for display on a display screen, said system being characterised by:

a stroke extremity detector (12) to store current extremity **values** of a new stroke during a **period** of **time** when said input stylus (84) is in contact with said tablet (80), the current extremity **values** being obtained from the maximum and minimum components of the **coordinate** signals corresponding to said **stroke** ;

an alignment system for orientating words so that they are horizontal with respect to a...

...horizontal words;

a word baseline determinator (53) for receiving a current word consisting of a **number** of **strokes** with associated **coordinate** signals and calculating from the coordinate signals a baseline for said current word;

a correcting...

00524846 **Image available**

PEN BASED EDIT CORRECTION INTERFACE METHOD AND APPARATUS

PROCEDE ET APPAREIL D'INTERFACE DE CORRECTION D'EDITION A STYLET

Patent Applicant/Assignee:

NATURAL INPUT SOLUTIONS INC,

Inventor(s):

MAXTED Sean Kenneth,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9956198 A2 19991104

Application: WO 99CA325 19990423 (PCT/WO CA9900325)

Priority Application: US 9882946 19980424; US 98113352 19981221

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE
GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK
MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU
ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH
CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW
ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 19952

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... single-click or tap is a pen down followed by a pen up within a **pre - selected** interval of **time** , where the absolute distance between the initial pen down coordinate and all subsequent present pen down **coordinates** stays within a **stroke** tolerance

value . A double-click consists of two consecutive single-clicks, where the absolute distance between the...

...initial pen down coordinate of the second single-click falls within a double click tolerance **value** and the pen down event of the second single click follows the pen up event of the first single-click within a **pre - selected** interval of **time** .

A point is defined as (X,Y) coordinate which represents the absolute position of the...

...a pre selected interval of time. ASCII is the American Standard Code of Information Interchange.

Handwriting time-out refers to a logic sequence wherein after each stroke is completed (ie: the...

...ordered set of strokes (displayed on the computer screen as Electronic Ink) are recognized by **handwriting** recognition software as ASCII, the timer is de-activated and reset back to zero and...

...back to zero and all Electronic Ink continues to be displayed on the computer screen".

sent to the **handwriting** recognition unit 261. If there is no block of text selected 263 the results are...If there was not a first stroke edit - 52 symbol the system goes to the **handwriting** analysis described above. On the other hand if the user keeps the pen in place...in Punctuation, Selection and Edit mode, by adding, deleting, or modifying existing models (eg: Stored **handwriting** samples) of these specialty symbols. In addition, the system allows a user to improve recognition...

Claim

... claim 2 wherein the input mode is chosen from the group consisting of dictation and **handwriting** .

19 A correction method as claimed in claim 18 wherein activating the **handwriting** input mode includes the steps of determining if the distance between the present pen down...wherein the plurality of text input attribute icons are chosen from the group consisting of **handwriting** bitmap icon, dictionary icon, speech icon, playback icon, keyboard icon, a pop-up keyboard icon...

28/3,K/8 (Item 8 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00315894 **Image available**
SYSTEM AND METHODS FOR SPACING, STORING AND RECOGNIZING ELECTRONIC REPRESENTATIONS OF HANDWRITING , PRINTING AND DRAWINGS
SYSTEME ET PROCEDES D'ESPACEMENT, DE STOCKAGE ET DE RECONNAISSANCE DES REPRESENTATIONS ELECTRONIQUES DE L'ECRITURE MANUSCRITE, D'IMPRESSION ET DE DESSIN

Patent Applicant/Assignee:
AHA SOFTWARE CORPORATION,
Inventor(s):

THOMPSON Michael P,
ROUILLER Michael W,
ALTMAN Dan,
KUSMER Steven R,
STIKELEATHER Gregory,
EVANS Michele M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9534047 A1 19951214
Application: WO 95US6168 19950519 (PCT/WO US9506168)
Priority Application: US 94253546 19940603

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR
KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SI SK TJ TT UA
UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF
BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 27385

SYSTEM AND METHODS FOR SPACING, STORING AND RECOGNIZING ELECTRONIC REPRESENTATIONS OF HANDWRITING , PRINTING AND DRAWINGS

Main International Patent Class: G06K-009/34

International Patent Class: G06K-09:00 ...

... G06K-09:40

Fulltext Availability:
Detailed Description

English Abstract

A system for spacing, storing and recognizing electronic representations of **handwriting** and printing comprises a central processing unit (12) that couples with a display device (34...

Detailed Description

System and Methods for Spacing, Storing and Recognizing Electronic Representations of **Handwriting**, Printing and Drawings
CROSS-REFERENCE TO RELATED APPLICATIONS
This application is a continuation-in-part...

...and M. Thompson, and entitled 'Method And Apparatus For Grouping And Manipulating Electronic Representations Of **Handwriting**, Printing And Drawings.'

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention...art with an improved system and method for spacing, storing and recognizing electronic representations of **handwriting**, printing, computer text., bit maps, and drawings. The system of the present invention comprises a ...with the present invention, an apparatus 10 for storing, manipulating and recognizing electronic representations of **handwriting**, printing, and drawings in accordance with the present invention is shown in

Figure 1. The...for processing and storing ink strokes that are found to be more similar to cursive **handwriting** or printed text. The writing layer 39 provides the functionality of a word-processing program...on the screen 34 by the preferred system as a guideline for a line of **handwriting**. In the preferred system, the user may adjust the spacing between the display lines drawn...i" or add a period.

Fuzzy logic is used to interpret the inputs including the **time duration** of the tap (Short for a tap, long for a stroke); the **number** of points gathered (Few for a tap, many for a stroke); and the maximum of...top of the stroke plus 1/24 of a line height is used as the **coordinate** to target the **stroke** to a particular line.

Once the strokes have been associated with a line, they are...provide good estimate of the typical character and word distances for the user's 20 **handwriting** and printing are, and this influences the word parsing passes and the points at which...200 points per second as a stroke is being input. Thus, storing several pages of **handwriting** as ink stroke representations can be expensive. The present invention advantageously reduces the amount of...

28/3,K/9 (Item 9 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00298823 **Image available**

METHOD OF AUTOMATED SIGNATURE VERIFICATION
PROCEDE DE VERIFICATION AUTOMATISEE DE SIGNATURE
Patent Applicant/Assignee:

QUINTET INCORPORATED,
MOUSSA Mohamed Ali,
CHAN Chih,
Inventor(s):
MOUSSA Mohamed Ali,
CHAN Chih,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9516974 A1 19950622
Application: WO 94US14588 19941214 (PCT/WO US9414588)
Priority Application: US 93654 19931217
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB HU JP KE KP KR KZ LK
LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SK TJ TT UA US UZ VN
KE MW SD SZ AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 9097

Main International Patent Class: G06K-009/00
International Patent Class: G06K-09:62 ...

... G06K-09:68
Fulltext Availability:
Detailed Description

Detailed Description

... set of template
input signatures 103 on the input device 102, e.g., by
28- **handwriting** the input signature 103 with the writing implement
7
104 on the pressure plate 105...map of the input signature 103,
may be identified and represented as an array of **integers** ,
At a step 606, a polar coordinate feature, comprising a
polar coordinate map of the input signature 103, may be
identified and represented as a vector of **integers** ,
At a step 607, a stroke turning feature, comprising a
set of **stroke** turning positions in a euclidean **coordinate** map,
may-be identified and represented as a bit vector,
211 Figure 6A shows a...

...the input signature 103 may be
partitioned into a set of X bins of equal **time duration** . A
preferred **value** for X may be 32.

281

I At.a movement determination step 60.?, the total...

28/3,K/10 (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00211830

COMPUTER WITH TABLET INPUT TO STANDARD PROGRAMS
ORDINATEUR COMPRENANT UNE ENTREE PAR NUMERISEUR POUR DES PROGRAMMES
STANDARD

Patent Applicant/Assignee:
WANG LABORATORIES INC,

Inventor(s):

MARTIN Patricia A,
HUNTINGTON Jonathan T II,
MCNALLY J Michael,
BARRETT David M,
WARD Jean Renard,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9209037 A1 19920529
Application: WO 91US4460 19910620 (PCT/WO US9104460)
Priority Application: US 90324 19901113

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AT AU BE CA CH DE DK ES FR GB GR IT JP LU NL SE

Publication Language: English

Fulltext Word Count: 21971

Fulltext Availability:

Detailed Description
Claims

Detailed Description

... 5 Sizing 32
2 6 Stacking 33
2 7 Sending a Character 33
2.2 **Handwriting** Recognition Device 34
2 1 Writing characters 35
2 1.1 Stroke Parsing and Character...

Claim

... the interface processor. Fig. 10 is a screen display showing three simulated device icons: keyboard, **handwriting**, and mouse. Fig. 11 illustrates relationships among the tablet, the display, and certain software components...input, simulated keyboard port output, and writes to the ink and mask planes. runs a **handwriting** recognition algorithm (a part of the simulated devices interface).
5 Interface Processor Firmware
There is...2 Simulated Devices
A set of simulated devices is available to the user: keyboard, mouse, **handwriting** input device. Some "simulated devices" in fact simulate, both to application programs and to the...
...any of the devices with which the application is designed to operate. For example, the **handwriting** input device is less closely related to a standard device. In a sense, the **handwriting** input device simulates (to the user) **handwriting** input previously only available with applications developed specifically for use with handwritten input. From the...
...this device simulates a keyboard; although keys need not be involved (real or simulated), the **handwriting** input device provides keycode data to the application. These input facilities are "devices" in the...a cursor control keypad, a numeric keypad) as well as drag and configure buttons. The **handwriting** device is shown with buttons on the top for sizing, adjusting box width, inserting, deleting...Typically, fimction boxes (sub-icons) scale with the overall size of an icon. In the **handwriting** icon, the letter boxes do not change size; the number of boxes visible changes. The...that keycode data (information about the pressing and releasing of

31/3,K/1 (Item 1 from file: 349)
DIALOG(R) File 349:PCT FULLTEXT
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00934028 **Image available**

NONINVASIVE MEASUREMENTS OF CHEMICAL SUBSTANCES
MESURE NON EFFRACTIVE DE SUBSTANCES CHIMIQUES

Patent Applicant/Inventor:

ABREU Marcio Marc, 3304 Dixwell Avenue, North Haven, CT 06473, US, US
(Residence), US (Nationality)

Legal Representative:

SCHERER Jonathan L (agent), Jacobson Holman, PLLC, 400 Seventh Street,
N.W., Washington, DC 20004, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200267688 A1 20020906 (WO 0267688)

Application: WO 2001US22607 20010820 (PCT/WO US0122607)

Priority Application: US 2001790653 20010223

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL
TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 107269

Fulltext Availability:

Detailed Description

Detailed Description

.... cause hypoxic stress leading to corneal swelling when said contact
lenses are worn for extended **periods of time**. The conjunctiva is
highly vascularized with internal supply of oxygen allowing extended wear
of the...is poorly innervated which allows placement of the ICL in the
conjunctival sac for long **periods of time** with no sensation of
discomfort by the user. There are only few pain fibers, but...the pump
action of the eye lid but alternatively by diffusion or

61

electrokinetically at **preset periods of time** such as every 30
minutes in order to preserve reagents present in the ICL microchip...cell
motion to be achieved and the finest control of fluid motion within
precise and **specific time** frames such as moving positive charges to a
certain microchannel and waiting a certain amount...golf, and a parent
with high blood pressure can have ICLs in their eyes detecting **stroke**
and heart markers while playing with their children in the comfort of
their homes and...Due to this phenomena the resulting spectra has to be
acquired in an extremely short **period of time** which is done in an
attempt to decrease the number of artifacts and source of...

...rapid changes in flow, measurements have to be repeated several times
within a very short **period of time** and the total averaged. This leads
to complicated construction of devices and controlling systems, but...

...poor signal to noise.

37/3,K/1 (Item 1 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
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00684664

Corner reduction device equipped with corner rolls, control device thereof,
and method of rolling by using these devices
Vorrichtung mit Eckenwalzen, zum Walzen von Ecken, ihre Steuervorrichtung
und Verfahren zum Walzen unter Verwendung von diesen Vorrichtungen
Dispositif equipe avec rouleaux pour angles, pour le laminage des angles,
son systeme de commande et procede pour laminier en utilisant ces
dispositifs

PATENT ASSIGNEE:

KAWASAKI STEEL CORPORATION, (273193), 1-1-28 Kitahonmachi-Dori, 1-chome;
Chuo-ku,, Kobe-shi Hyogo-ken 651, (JP), (applicant designated states:
DE;FR;GB)
Ishikawajima-Harima Heavy Industries Co., Ltd., (825841), 2-1, Ohtemachi
2-chome, Chiyoda-ku, Tokyo 100, (JP), (applicant designated states:
DE;FR;GB)

INVENTOR:

Ishikawa, Takashi, c/o Chiba Works, Kawasaki Steel Corporation, 1,
Kawasaki-cho, Chuo-ku, Chiba-shi, Chiba 260, (JP)
Yunde, Takao, c/o Chiba Works, Kawasaki Steel Corporation, 1,
Kawasaki-cho, Chuo-ku, Chiba-shi, Chiba 260, (JP)
Takechi, Toshisada, c/o Chiba Works, Kawasaki Steel Corporation, 1,
Kawasaki-cho, Chuo-ku, Chiba-shi, Chiba 260, (JP)
Okada, Katsumi, Ishikawajima-Harima, Heavy Ind. Co., Ltd., 1,
Shinnakahara-cho, Isogo-ku, Yokohama-shi, Kanagawa 235, (JP)
Amakawa, Takatoshi, Ishikawajima-Harima, Heavy Ind. Co., Ltd., 1,
Shinnakahara-cho, Isogo-ku, Yokohama-shi, Kanagawa 235, (JP)

LEGAL REPRESENTATIVE:

Stebbing, Timothy Charles et al (59641), Haseltine Lake & Co., Imperial
House, 15-19 Kingsway, London WC2B 6UD, (GB)

PATENT (CC, No, Kind, Date): EP 654310 A1 950524 (Basic)
EP 654310 B1 970730

APPLICATION (CC, No, Date): EP 94118357 941122;

PRIORITY (CC, No, Date): JP 93293569 931124; JP 9471261 940317

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: B21B-001/02; B21B-037/22; B21B-013/10;
B21B-013/06;

ABSTRACT WORD COUNT: 187

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	1908
CLAIMS B	(English)	9707W5	1303
CLAIMS B	(German)	9707W5	995
CLAIMS B	(French)	9707W5	1542
SPEC A	(English)	EPAB95	8810
SPEC B	(English)	9707W5	9008
Total word count - document A			10720
Total word count - document B			12848
Total word count - documents A + B			23568

...SPECIFICATION deviation from the calculator 450a and changing it to a
pulse; 455a represents a scale **converter** for controlling the **number**
of pulses per **stroke** of the **position** sensor 448a to a scale of the
number of pulses per deviation of a set...of the calculator 450b to a
pulse after integral calculation control; 455b denotes a scale **converter**

for controlling the **number** of pulses per **stroke** of output of the **position** sensor 448b to a scale of the number of pulses per deviation of a set...

...SPECIFICATION deviation from the calculator 450a and changing it to a pulse; 455a represents a scale **converter** for controlling the **number** of pulses per **stroke** of the **position** sensor 448a to a scale of the number of pulses per deviation of a set...of the calculator 450b to a pulse after integral calculation control; 455b denotes a scale **converter** for controlling the **number** of pulses per **stroke** of output of the **position** sensor 448b to a scale of the number of pulses per deviation of a set...

37/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00545710

Character recognition method and apparatus thereof
Verfahren und Gerat zur Zeichenerkennung
Procede et appareil de reconnaissance de caracteres
PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,
Tokyo, (JP), (Proprietor designated states: all)

INVENTOR:

Sakaguchi, Katsuhiko, c/o Canon Kabushiki Kaisha, 30-2, Shimomaruko
3-chome, Ohta-ku, Tokyo, (JP)
Mori, Shigeki, c/o Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome,
Ohta-ku, Tokyo, (JP)
Matsubayashi, Kazuhiro, c/o Canon Kabushiki Kaisha, 30-2, Shimomaruko
3-chome, Ohta-ku, Tokyo, (JP)
Arai, Tsunekazu, c/o Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome,
Ohta-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. High Holborn
2-5 Warwick Court, London WC1R 5DJ, (GB)

PATENT (CC, No, Kind, Date): EP 542566 A2 930519 (Basic)
EP 542566 A3 930908
EP 542566 B1 991006

APPLICATION (CC, No, Date): EP 92310386 921113;

PRIORITY (CC, No, Date): JP 91299264 911114

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-009/46; G06K-009/80; G06K-009/68

ABSTRACT WORD COUNT: 130

NOTE:

Figure number on first page: 12

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9940	874
CLAIMS B	(German)	9940	799
CLAIMS B	(French)	9940	1132
SPEC B	(English)	9940	3840
Total word count - document A			0
Total word count - document B			6645
Total word count - documents A + B			6645

...SPECIFICATION on the above direction data which is inputted from the

stroke characterization unit 2. The **stroke** dictionary 4 stores the **direction** data and feature **stroke number** in pair. The **direction** data is **converted** to the feature **stroke number** with reference to the stroke dictionary 4 (steps S105, S106, and S107). Fig. 5 illustrates...

37/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00288733

Press.

Presse.

Presse.

PATENT ASSIGNEE:

Siemens Aktiengesellschaft, (200520), Wittelsbacherplatz 2, W-8000
Munchen 2, (DE), (applicant designated states:
BE;CH;DE;ES;FR;GB;IT;LI;NL;SE)

INVENTOR:

Baisch, Roderich, Dipl.-Ing., Borsigstrasse 1a, W.8520 Erlangen, (DE)
Klose, Gunter, Arzberger Strasse 15a, W.8523 Baiersdorf, (DE)

PATENT (CC, No, Kind, Date): EP 286908 A1 881019 (Basic)
EP 286908 B1 910327

APPLICATION (CC, No, Date): EP 88105119 880329;

PRIORITY (CC, No, Date): DE 3712035 870409

DESIGNATED STATES: BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: B30B-015/14;

TRANSLATED ABSTRACT WORD COUNT: 101

ABSTRACT WORD COUNT: 80

LANGUAGE (Publication,Procedural,Application): German; German; German
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(German)	EPABF1	174
SPEC B	(German)	EPABF1	847
Total word count - document A			0
Total word count - document B			1021
Total word count - documents A + B			1021

...ABSTRACT its immediate driving member (E) is measured, and on the other hand the size and **direction** of the envisaged fine **stroke** (delta x) is predetermined. From all these **values**, a **converter** (U2) determines the duration of a control signal (ST), which triggers the engagement of a...
?

File 9:Business & Industry(R) Jul/1994-2004/Aug 18
 (c) 2004 The Gale Group
 File 15:ABI/Inform(R) 1971-2004/Aug 20
 (c) 2004 ProQuest Info&Learning
 File 16:Gale Group PROMT(R) 1990-2004/Aug 20
 (c) 2004 The Gale Group
 File 20:Dialog Global Reporter 1997-2004/Aug 20
 (c) 2004 The Dialog Corp.
 File 47:Gale Group Magazine DB(TM) 1959-2004/Aug 20
 (c) 2004 The Gale group
 File 75:TGG Management Contents(R) 86-2004/Aug W2
 (c) 2004 The Gale Group
 File 80:TGG Aerospace/Def.Mkts(R) 1986-2004/Aug 20
 (c) 2004 The Gale Group
 File 88:Gale Group Business A.R.T.S. 1976-2004/Aug 19
 (c) 2004 The Gale Group
 File 98:General Sci Abs/Full-Text 1984-2004/Jul
 (c) 2004 The HW Wilson Co.
 File 112:UBM Industry News 1998-2004/Jan 27
 (c) 2004 United Business Media
 File 141:Readers Guide 1983-2004/Jul
 (c) 2004 The HW Wilson Co
 File 148:Gale Group Trade & Industry DB 1976-2004/Aug 20
 (c)2004 The Gale Group
 File 160:Gale Group PROMT(R) 1972-1989
 (c) 1999 The Gale Group
 File 275:Gale Group Computer DB(TM) 1983-2004/Aug 20
 (c) 2004 The Gale Group
 File 264:DIALOG Defense Newsletters 1989-2004/Aug 20
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 File 484:Periodical Abs Plustext 1986-2004/Aug W2
 (c) 2004 ProQuest
 File 553:Wilson Bus. Abs. FullText 1982-2004/Jul
 (c) 2004 The HW Wilson Co
 File 570:Gale Group MARS(R) 1984-2004/Aug 20
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 File 608:KR/T Bus.News. 1992-2004/Aug 20
 (c)2004 Knight Ridder/Tribune Bus News
 File 620:EIU:Viewswire 2004/Aug 19
 (c) 2004 Economist Intelligence Unit
 File 613:PR Newswire 1999-2004/Aug 20
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 (c) 2004 McGraw-Hill Co. Inc
 File 634:San Jose Mercury Jun 1985-2004/Aug 19
 (c) 2004 San Jose Mercury News
 File 635:Business Dateline(R) 1985-2004/Aug 20
 (c) 2004 ProQuest Info&Learning
 File 636:Gale Group Newsletter DB(TM) 1987-2004/Aug 20
 (c) 2004 The Gale Group
 File 647:CMP Computer Fulltext 1988-2004/Aug W2
 (c) 2004 CMP Media, LLC
 File 696:DIALOG Telecom. Newsletters 1995-2004/Aug 19
 (c) 2004 The Dialog Corp.
 File 674:Computer News Fulltext 1989-2004/Jul W4
 (c) 2004 IDG Communications
 File 810:Business Wire 1986-1999/Feb 28

File 813:PR Newswire 1987-1999/Apr 30
(c) 1999 PR Newswire Association Inc
File 587:Jane's Defense&Aerospace 2004/Aug W1
(c) 2004 Jane's Information Group

Set	Items	Description
S1	60639	HANDWRITING OR HAND()WRITING
S2	3450	PENMANSHIP
S3	25071	(USER OR HAND) (3N) (DRAW? OR SCRIBBL?)
S4	442798	STROKES OR STROKING OR STROKE OR STROKED
S5	8983	S4 (5N) (DIRECTION? OR PLACEMENT? OR POSITION? OR DISTANCE OR FLOW? OR COORDINAT??? OR COORDINANT? OR XY OR EAST OR WEST OR NORTH OR SOUTH)
S6	981942	TIME(3N) (LIMIT?? OR THRESHOLD? OR PERIOD? OR DURATION)
S7	303396	(PRESELECT? OR (PRE() (SELECT? OR SET OR DETERMIN? OR SELEC-T? OR SPECIFIED) OR PREDETERMIN? OR SPECIFIC OR SPECIFIED OR - SET OR PRESET)) (3N) (TIME OR DURATION)
S8	6443	S4 (5N) (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? - OR NUMERICAL OR NUMERAL??)
S9	139075	(CHARACTER?) (3N) (RECOGN? OR ANALYSIS OR ANALYZ? OR DETECT? OR DETERMIN? OR EVALUAT? OR ASSES?)
S10	1879	S9 (5N) (DIRECTION? OR PLACEMENT? OR POSITION? OR DISTANCE OR FLOW? OR COORDINATE?? OR COORDINANT? OR XY OR EAST OR WEST OR NORTH OR SOUTH)
S11	700	AU=(WILKINSON, T? OR MEHLITZ, P? OR WILKINSON T? OR MEHLITZ P?)
S12	0	S1 AND S11
S13	37	(S1 OR S2) (S) S5
S14	0	S13(S) (CONVERS? OR CONVERT?) (S) (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? OR NUMERICAL OR NUMERAL??)
S15	0	S13(S) (S6 OR S7)
S16	19	RD S13 (unique items)
S17	16	S5(S) (CONVERS? OR CONVERT?) (S) (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? OR NUMERICAL OR NUMERAL??)
S18	13	RD S17 (unique items)
S19	8	S18 NOT MACHINE
S20	34	S5(S) (S6 OR S7)
S21	0	S20(S) S1
S22	193	TRANSVIRTUAL() TECHN?
S23	3	S22 AND S1
S24	2	RD S23 (unique items)

16/3,K/1 (Item 1 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2004 The Gale Group. All rts. reserv.

3582680 Supplier Number: 03582680 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Write on: tablet PCs will arrive late this year. Are they the next big thing or a future footnote? (Hardware)

Government Computer News, p 6(2)
September 02, 2002
DOCUMENT TYPE: Journal ISSN: 0738-4300 (United States)
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 1831

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:
...clicking or dragging ordinarily done with a mouse.

Microsoft's Digital Ink technology underlies the **handwriting** recognition feature of XP Tablet PC Edition. At the heart of the technology is an algorithm that tracks the pressure of the stylus, along with the **coordinates** and timing of pen **strokes**, to help determine the actual meaning of handwritten characters and words. It doesn't store **handwriting** as a bitmap or a series of coordinates; instead it stores **handwriting** as a data type with its own unique set of properties.

This way, a tablet...

16/3,K/2 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2004 ProQuest Info&Learning. All rts. reserv.

01810464 04-61455
Reading employees
Leonard, Bill
HRMagazine v44n4 PP: 67-73 Apr 1999
ISSN: 1047-3149 JRNL CODE: PAD
WORD COUNT: 3084

...TEXT: Society of Professional Graphologists in Great Neck, N.Y.

Graphologists say the Americans' interest in **handwriting** analysis is high right now. Beverley **East**, president of **Strokes** and Slants, a Washington, D.C.-based graphoanalysis company, believes that the high-profile murder... samples-a signature and a full page of text on unlined paperwere submitted to Beverley **East**, president of **Strokes** and Slants of Washington, D.C.; Mark Hopper, president of **Handwriting** Research Corp. of Phoenix; and Adrien Stringer, president of the Association of Qualified Graphologists of...

16/3,K/3 (Item 2 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2004 ProQuest Info&Learning. All rts. reserv.

00612928 92-28031
A Script for Screening
Hopper, Mark A.; Stanford, Karen S.

Security Management v36n5 PP: 72-81 May 1992
ISSN: 0145-9406 JRNL CODE: SEM
WORD COUNT: 4179

...TEXT: of handwriting as though each stroke represented a gesture or action by the writer.

Klages' position was that since handwriting strokes can be measured and rated, a reliable system of interpretation could also be established and...

16/3,K/4 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2004 The Gale Group. All rts. reserv.

10161579 Supplier Number: 93069970 (USE FORMAT 7 FOR FULLTEXT)
Write on: tablet PCs will arrive late this year. Are they the next big thing or a future footnote? (Hardware).

Miles, J.B.
Government Computer News, p6(2)
Sept 2, 2002
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Professional Trade
Word Count: 1929

... clicking or dragging ordinarily done with a mouse.

Microsoft's Digital Ink technology underlies the handwriting recognition feature of XP Tablet PC Edition. At the heart of the technology is an algorithm that tracks the pressure of the stylus, along with the coordinates and timing of pen strokes, to help determine the actual meaning of handwritten characters and words. It doesn't store handwriting as a bitmap or a series of coordinates; instead it stores handwriting as a data type with its own unique set of properties.

This way, a tablet...

16/3,K/5 (Item 1 from file: 20)
DIALOG(R)File 20:Dialog Global Reporter
(c) 2004 The Dialog Corp. All rts. reserv.

28067124 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Sticking it to the Man
David Shamah
JERUSALEM POST
March 07, 2003
JOURNAL CODE: WJPT LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 1699

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... a good feel for what goes on behind the scenes of a graphological analysis, download Handwriting Analyst, a good primer that will familiarize you with the way the graphology business works...

16/3,K/6 (Item 2 from file: 20)
DIALOG(R)File 20:Dialog Global Reporter
(c) 2004 The Dialog Corp. All rts. reserv.

02164510 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Newspoint: The deskman

VERGEL O. SANTOS

BUSINESSWORLD (PHILIPPINES)

July 10, 1998

JOURNAL CODE: FBWP LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 1012

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... the few samples that have impressed me with one look - tidy rewrite, confident-looking pencil **strokes**, immaculate **handwriting**, unmistakable **directional** markings - and as I look closely, I begin to see, really see, what copyediting is...

16/3,K/7 (Item 1 from file: 47)

DIALOG(R)File 47:Gale Group Magazine DB(TM)

(c) 2004 The Gale group. All rts. reserv.

05417697 SUPPLIER NUMBER: 55425929 (USE FORMAT 7 OR 9 FOR FULL TEXT)

The tide of prints. (includes related article on other biometric identification technologies and handwriting identification) (FBI's Integrated Automated Fingerprint Identification System)

Scigliano, Eric

Technology Review (Cambridge, Mass.), 102, 1, 62(6)

Jan 1, 1999

ISSN: 1099-274X LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 4336 LINE COUNT: 00344

... retinal scans at their entries, but don't look for them soon at your ATM.

Handwriting recognition (see "Secret Handshakes," p. 66) is a tricky, specialized business, requiring a block of...

...with just a signature, "read" on an electronic pad that measures the speed, pressure and **direction** of **strokes**. This fast-developing technology's accuracy is still a subject of debate, but it can...

16/3,K/8 (Item 2 from file: 47)

DIALOG(R)File 47:Gale Group Magazine DB(TM)

(c) 2004 The Gale group. All rts. reserv.

05002003 SUPPLIER NUMBER: 19897659 (USE FORMAT 7 OR 9 FOR FULL TEXT)

What his handwriting says about him.

Casewit, C.W.

Teen Magazine, v41, n9, p86(2)

Sep, 1997

ISSN: 0040-2001 LANGUAGE: English RECORD TYPE: Fulltext; Abstract

WORD COUNT: 704 LINE COUNT: 00054

... from his notebook) and analyze away to romantic rewards!

Man of Honor

This guy's **handwriting** is easy to read - and so is he! The neatness, uncomplicated **strokes** and **flowing** natural rhythm point to a person who is honest and sincere. On the other hand...

16/3,K/9 (Item 3 from file: 47)

DIALOG(R)File 47:Gale Group Magazine DB(TM)
(c) 2004 The Gale group. All rts. reserv.

03885797 SUPPLIER NUMBER: 13720630 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Precision input. (includes highlights of evaluations and related articles
on Editors' Choice products, large-format digitizers, pen computers and
pressure-sensitive digitizing tablets) (Hardware Review) (overview of 11
evaluations of digitizing tablets) (Evaluation)**
Miller, Rock
PC Magazine, v12, n10, p259(17)
May 25, 1993
DOCUMENT TYPE: Evaluation ISSN: 0888-8507 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 4551 LINE COUNT: 00356

... your system read the location of points very precisely. But with a
pen PC, the **direction** and intensity of the **strokes** are what matter most
since these form the basis of the "gestures" that pen-computer operating
systems interpret to control software and recognize **handwriting** .
Making a digitizer work in a portable-pen environment thus requires a
few changes. For...

16/3,K/10 (Item 4 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM)
(c) 2004 The Gale group. All rts. reserv.

03798744 SUPPLIER NUMBER: 12779311 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**The lowdown on handwriting analysis; is it for real? (includes related
material and handwriting samples provided by Andrea McNichol and Jeff
Nelson)**
Psychology Today, v25, n6, p46(9)
Nov-Dec, 1992
CODEN: PSTOA ISSN: 0033-3107 LANGUAGE: ENGLISH RECORD TYPE:
FULLTEXT; ABSTRACT
WORD COUNT: 4389 LINE COUNT: 00338

... well-adjusted person? It's crazy. There is no consistency
whatsoever. The slant of the **strokes** veers in all **directions** . The
writer's mind was obviously traveling a hundred paths at once. So it's not
going to surprise you when I tell you that this is Charles Manson's
handwriting . Not all crazy people write like this of course, but the
standouts are very recognizable...

16/3,K/11 (Item 1 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2004 The Gale Group. All rts. reserv.

05425039 SUPPLIER NUMBER: 62257652
Data Clustering: A Review.
JAIN, A.K.; MURTY, M.N.; FLYNN, P.J.
ACM Computing Surveys, 31, 3, 264
Sept, 1999
ISSN: 0360-0300 LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 30715 LINE COUNT: 02521

... the data of classes other than that to which the lexeme belongs.
In this system, **handwriting** is captured by digitizing the (x, y)
position of the pen and the state of...

...A metric based on elastic template matching and dynamic programming is defined to allow the **distance** between two **strokes** to be calculated.

Using the distances calculated in this manner, a proximity matrix is constructed...

16/3,K/12 (Item 2 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2004 The Gale Group. All rts. reserv.

04874549 SUPPLIER NUMBER: 20825181
Offline recognition of Chinese handwriting by multifeature and multilevel classification.

Tang, Yuan Y.; Tu, Lo-Ting; Liu, Jiming; Lee, Seong-Whan; Lin, Win-Win; Shyu, Ing-Shyh

IEEE Transactions on Pattern Analysis and Machine Intelligence, v20, n5, p556(6)

May, 1998

ISSN: 0162-8828 LANGUAGE: English RECORD TYPE: Abstract

AUTHOR ABSTRACT: One of the most challenging topics is the recognition of Chinese **handwriting**, especially offline recognition. In this paper, an offline recognition system based on multifeature and multilevel...

...is presented for handwritten Chinese characters. Ten classes of multifeatures, such as peripheral shape features, **stroke** density features, and **stroke direction** features, are used in this system. The multilevel classification scheme consists of a group classifier...

...a unique candidate, and 98 percent for multichoice with 10 candidates. Index Terms - Offline Chinese **handwriting** recognition, multifeature, multilevel classification, overlap clustering, Gaussian distribution selector.

16/3,K/13 (Item 3 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.
(c) 2004 The Gale Group. All rts. reserv.

01822835 SUPPLIER NUMBER: 06552203
A method of recognition of Arabic cursive handwriting.

Almuallim, Hussein; Yamaguchi, Shoichiro

IEEE Transactions on Pattern Analysis and Machine Intelligence, v9, n5, p715(8)

Sept, 1987

ISSN: 0162-8828 LANGUAGE: English RECORD TYPE: Abstract

ABSTRACT: A proposed method recognizes Arabic cursive **handwriting**. The method divides words into strokes. The strokes are classified according to their geometrical and topological properties. The method examines the relative **positions** of the classified **strokes**, then combines the strokes into a character string that represents a word. Experiments with handwritten...

16/3,K/14 (Item 1 from file: 141)
DIALOG(R)File 141:Readers Guide
(c) 2004 The HW Wilson Co. All rts. reserv.

01502889 H.W. WILSON RECORD NUMBER: BRGA89002889

Back to basics.

AUGMENTED TITLE: Write-Top, a portable computer that reads handwriting
Waters, Tom.

Discover (Discover) v. 9 (Dec. '88) p. 26-7

...ABSTRACT: Sklarew, a former physicist, invented Linus's Write-Top computer and its algorithm for reading **handwriting**. **Handwriting** algorithms normally work from a pre-established idea of what **handwriting** looks like, but Sklarew's algorithm learns how the individual user writes. In an initial session of about half an hour, it takes **handwriting** samples and records the salient features of each letter. The algorithm records not only the shape of a letter but also the order and **direction** of the **strokes** the user makes to form it. As a result, the program can read any **handwriting**, no matter how messy. The initial uses for the computer are likely to be tasks...

16/3,K/15 (Item 1 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.

06476865 SUPPLIER NUMBER: 13918251 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Apple soliciting users to test pen-based PBs. (PowerBooks)

Gore, Andrew

MacWEEK, v7, n23, p1(2)

June 7, 1993

ISSN: 0892-8118

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 589

LINE COUNT: 00047

... type that combines a bit map of what's written on screen with information about **stroke** velocity, weight and **direction**.

According to Orr, the current version of the pen extension works with most shipping Macintosh...

16/3,K/16 (Item 2 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.

04601887 SUPPLIER NUMBER: 08548724 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Expanding displays seize new functions.

Maliniak, David

Electronic Design, v38, n10, p29(3)

May 24, 1990

ISSN: 0013-4872

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 1366

LINE COUNT: 00108

... In one developing application, these position coordinates can be aggregated into strokes and interpreted by **handwriting**-recognition software subsystems.

The PLI system has been successfully developed to run on a number...

16/3,K/17 (Item 3 from file: 148)

DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2004 The Gale Group. All rts. reserv.

03881873 SUPPLIER NUMBER: 07098204 (USE FORMAT 7 OR 9 FOR FULL TEXT)

Gestures recognizes handwriting. (software) (product announcement)

Battelle, John
MacWEEK, v3, n10, p1(2)
March 7, 1989

DOCUMENT TYPE: product announcement ISSN: 0892-8118 LANGUAGE:
ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 463 LINE COUNT: 00038

...ABSTRACT: MSDOS, Unix, and Atari systems. Gestures tracks motions of the input device and compares geometry, **direction** and speed of **stroke** to a symbol dictionary. Gestures is available for licensing now. No price was given.

16/3,K/18 (Item 1 from file: 484)
DIALOG(R)File 484:Periodical Abs Plustext
(c) 2004 ProQuest. All rts. reserv.

01197367 (USE FORMAT 7 OR 9 FOR FULLTEXT)
The Lowdown on Handwriting Analysis: Is It for Real?
Scanlon, Matthew; Mauro, James
Psychology Today (GPSY), v25 n6, p46-53+, p.9
Nov 1992
ISSN: 0033-3107 JOURNAL CODE: GPSY
DOCUMENT TYPE: Feature
LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 4159 LENGTH: Long (31+ col inches)

TEXT:

... well-adjusted person? It's crazy. There is no consistency whatsoever. The slant of the **strokes** veers in all **directions**. The writer's mind was obviously traveling a hundred paths at once. So it's not going to surprise you when I tell you that this is Charles Manson's **handwriting**. Not all crazy people write like this of course, but the standouts are very recognizable...

16/3,K/19 (Item 1 from file: 553)
DIALOG(R)File 553:Wilson Bus. Abs. FullText
(c) 2004 The HW Wilson Co. All rts. reserv.

04035888 H.W. WILSON RECORD NUMBER: BWBA99035888 (USE FORMAT 7 FOR FULLTEXT)
Ethics in a technological age.
Koehn, Daryl
Business and Society Review v. 104 n01 (Spring 1999) p. 57-90
LANGUAGE: English
WORD COUNT: 14177

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

... ethic. Employment decisions increasingly are made using quantitative techniques. Some firms rely upon graphology or **handwriting** analysis to determine whom they should hire. The length of a person's **handwriting strokes**, the **direction** of the writing, the exerted pressure--all quantitatively measurable criteria--are assumed to correlate in...
?

19/3,K/1 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

02614828 358827021

Direct-Drive Linear Motion Lives!

Bartos, Frank J

Control Engineering v50n4 PP: 34 Apr 2003

ISSN: 0010-8049 JRNL CODE: STCE

...ABSTRACT: drive linear motion systems eliminate gearboxes, ballscrews, belts, couplings, or other rotary-to-linear motion **converters** between motor and load--offering superior speed, acceleration, load- **positioning** accuracy, and rapid **stroke** cycling, compared to systems based on rotary motors.. Manufacturers are hard at work to cut...

... new life into direct-drive linear (DDL) motion systems. One way that suppliers inject added **value** into DDL motion products is by integrating motor, bearings, and feedback device into a complete...

19/3,K/2 (Item 2 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

(c) 2004 ProQuest Info&Learning. All rts. reserv.

00565226 91-39580

Selecting Electromechanical Linear Actuators

Alfano, Don

Machine Design v63n14 PP: 79-83 Jul 11, 1991

ISSN: 0024-9114 JRNL CODE: MDS

ABSTRACT: Electromechanical linear actuators **convert** rotary motion and torque into linear thrust and displacement. Because they are easily interfaced and...

... in precision motion-control applications. Major selection factors for the actuators are load, voltage, and **stroke**. The **value** and **direction** of dynamic load are critical factors in selecting a linear actuator. In horizontal applications, load...

19/3,K/3 (Item 1 from file: 160)

DIALOG(R)File 160:Gale Group PROMT(R)

(c) 1999 The Gale Group. All rts. reserv.

00846264

Pencept announced a computer graphics package designed for hand-printed and hand-drawn alphanumerical and graphical data entry.

Electronics November 17, 1982 p. 42

...control unit that stands in for the keyboards of personal computers. Software analyzes the timing, **direction**, and **number** of pen **strokes** used to print on paper forms overlaying the digitizing pad and **converts** printed characters into **ASCII** code.

...

19/3,K/4 (Item 1 from file: 264)

DIALOG(R)File 264:DIALOG Defense Newsletters

(c) 2004 The Dialog Corp. All rts. reserv.

00007615

WHAT'S WITH MATRIX?

WORLD AEROSPACE WEEKLY

August 5, 1994

DOCUMENT TYPE: NEWSLETTER

PUBLISHER: FORECAST INTERNATIONAL DMS

LANGUAGE: ENGLISH

WORD COUNT: 169

RECORD TYPE: FULLTEXT

(c) FORECAST INTERNATIONAL All Rights Reserved

TEXT:

...and can totally enclose two 747-400s and one MD-11 simultaneously. Capabilities include cargo **conversions**, 747 Section 41 inspection and termination, and cockpit upgrades (e.g., TCAS and wind shear...

...there remains the feeling among some analysts that the money behind this undertaking has the **stroke** to drive Mexican and Far **East** aircraft into the facility. Matrix Aeronautica is a private 50/50 joint venture between investors...

...by Phase III, with another equal size hangar built. By that time, the staff will **number** 3,800 personnel.

...

19/3,K/5 (Item 1 from file: 484)

DIALOG(R)File 484:Periodical Abs Plustext

(c) 2004 ProQuest. All rts. reserv.

05466434 SUPPLIER NUMBER: 108784519 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Defining and measuring speech movement events

Tasko, Stephen M; Westbury, John R

Journal of Speech, Language, & Hearing Research (IJHR), v45 n1, p127-142

, p.16

Feb 2002

ISSN: 1092-4388

JOURNAL CODE: IJHR

DOCUMENT TYPE: Feature

LANGUAGE: English

RECORD TYPE: Fulltext; Abstract

WORD COUNT: 8271

TEXT:

... time.

Figure 6 shows box and whisker plots of the speaker distribution based on median **values** for each pellet and kinematic measure. The lower and upper limit of each box, respectively...

...across the speaker pool T1 and MI, respectively, have the shortest and longest durations. Typical **values** for T1 range between 110 ms and 125 ms, whereas MI durations range between 160...

...between T1 and MI, whereas LL durations largely overlap T1 and T4. For the measure **stroke distance**, T1 **strokes** typically cover distances ranging from 4 mm to 8 mm. T4 stroke distances range from...

...mm to 4 mm. For peak speed, Ti exhibits the largest peak speeds, with typical **values** ranging from 50 mm/s to 100 mm/s. T4 peak speeds fall between 40...

...generally follow the same trend as peak speed, with T1 and T4 exhibiting larger median **values** than LL and MI. Differences were evaluated statistically using a series of Wilcoxon signed rank...

...duration, all differences were statistically significant, with the exception of the T1-LL comparison. For **stroke distance** and peak **stroke speed**, all comparisons were significantly different, with the exception of the LL-MI comparison. Boundary speeds were significantly different for all pair-wise comparisons. To summarize, there are a **number** of observations worth highlighting. T1 typically traverses the longest distance at the highest speeds over the shortest durations. **Conversely**, MI typically moves the shortest distances at the lowest speed over the longest durations. In general, T4 behaves like T1, but with less extreme **values**. LL is similar to MI for **stroke distance** and peak and boundary speeds, but has markedly shorter durations.

Figure 6,
Kinematic Features of...

19/3,K/6 (Item 1 from file: 613)
DIALOG(R)File 613:PR Newswire
(c) 2004 PR Newswire Association Inc. All rts. reserv.

00157804 19990803PHTU030 (USE FORMAT 7 FOR FULLTEXT)
KePRO, Inc. Begins Serving Ohio Medicare Patients
PR Newswire
Tuesday, August 3, 1999 14:51 EDT
JOURNAL CODE: PR LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
DOCUMENT TYPE: NEWSWIRE
WORD COUNT: 392

...quality of care Medicare patients
in Ohio receive and will work on six national Medicare **health care**
improvement
projects -- diabetes, pneumonia, **stroke**, breast cancer, acute myocardial
infarction (heart attack), and congestive heart failure. The company is
required...

...which must focus on a minority population.
KePRO also will work to help reduce the **number** of payment errors
hospitals
make when billing Medicare.

"We've worked very hard to make...

19/3,K/7 (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2004 The Gale Group. All rts. reserv.

03828337 Supplier Number: 48313265 (USE FORMAT 7 FOR FULLTEXT)
TPA STROKE STUDIES SUGGEST STRATEGY FOR NEURON PROTECTION
BIOWORLD Today, v9, n35, pN/A
Feb 24, 1998
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 939

... Genentech's director of corporate communications.
Located in brain tissue and small blood vessels, tPA **converts**

plasminogen to plasmin, which dissolves blood clots. It is the first agent to be approved by the FDA to destroy clots and restore blood **flow** in the brains of **stroke** victims. Marketed by Genentech as Activase, recombinant tPA is meant to be administered within three...

...used as indicated in the correct patient population, it can improve disabilities in a significant **number** of stroke victims.

Neuronal damage following a stroke is thought to be caused in large...

19/3,K/8 (Item 2 from file: 636)
DIALOG(R) File 636:Gale Group Newsletter DB(TM)
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02649123 Supplier Number: 45365690 (USE FORMAT 7 FOR FULLTEXT)
Fractal Design Painter 3.0: 'providing the subtlety to tempt graphic artists into the digital medium'
Desktop Publishing Commentary, v10, n9, pN/A
March, 1995
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 542

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...has expanded to include animators and digital video producers. The new, streamlined interface condenses the **number** of palettes from 14 to seven. There is plenty of functionality in each one, so...

...multiple layers of tracing paper. Using Painter's cloning and Natural Media features, users can **convert** an AVI movie clip into an animated oil painting. Alternatively, a masking brush can be...

...controlled by how hard the graphics tablet is pressed. Shapes can be pointed in the **direction** of the user's **strokes**, an AVI file can be **converted** into an Image Hose nozzle, and animated objects can be sprayed into a movie clip...

?

24/3,K/1 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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02211270 77842744

Mobile Linux draws support, suspicion

Moore, Bert

Frontline Solutions v2n9 PP: 1, 46+ Aug 2001

ISSN: 1528-6363 JRNL CODE: FRSE

WORD COUNT: 1719

...TEXT: addition to a 240- by 320-pixel (1/4 VGA) backlit LCD display, touchscreen and **handwriting** recognition, 19-key keypad and all the other usual features, the DAT500 has successfully passed...

... that provides a fully functional screen-top, Web browser, terminal emulator, pop-up keyboard and **handwriting** recognition. This serves as the basis for development and execution of Linux-based applications for the Compaq iPAQ.

PocketLinux PDA Framework from **Transvirtual Technologies** (www.pocketlinux.org), integrates Kaffe (a "dean room" implementation of Java) with a Transvirtual-- developed...

24/3,K/2 (Item 1 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter

(c) 2004 The Dialog Corp. All rts. reserv.

12678305 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Developers prepare to challenge in PDAs

Arman Danesh

SOUTH CHINA MORNING POST, p7

September 05, 2000

JOURNAL CODE: FSCP LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 636

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... 3 offers a 160 by 240 pixel display with 16 grey-scale shades, a natural **handwriting** recognition system and a 32-bit MIPS processor.

According to Agenda president Roger Richards, the...

...149.

Agenda Computing is not the only organisation promoting Linux as a platform for PDAs. **Transvirtual Technologies** used the Expo to deliver a developer release of its PocketLinux platform.

PocketLinux is an...

?

File 344:Chinese Patents Abs Aug 1985-2004/May
(c) 2004 European Patent Office
File 347:JAPIO Nov 1976-2004/Apr(Updated 040802)
(c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200453
(c) 2004 Thomson Derwent

Set	Items	Description
S1	6045	HANDWRITING OR HAND()WRITING
S2	79	PENMANSHIP
S3	4659	(USER OR HAND) (3N) (DRAW? OR SCRIBBL?)
S4	109978	STROKES OR STROKING OR STROKE OR STROKED
S5	52775	S4 AND (DIRECTION? OR PLACEMENT? OR POSITION? OR DISTANCE - OR FLOW? OR COORDINAT??? OR COORDINANT? OR XY OR EAST OR WEST OR NORTH OR SOUTH)
S6	179371	TIME(3N) (LIMIT?? OR THRESHOLD? OR PERIOD? OR DURATION)
S7	202759	(PRESELECT? OR (PRE() (SELECT? OR SET OR DETERMIN? OR SELEC- T? OR SPECIFIED) OR PREDETERMIN? OR SPECIFIC OR SPECIFIED OR - SET OR PRESET)) (3N) (TIME OR DURATION)
S8	18086	S4 AND (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? OR NUMERICAL OR NUMERAL??)
S9	271633	(CHARACTER?) AND (RECOGN? OR ANALYSIS OR ANALYZ? OR DETECT? OR DETERMIN? OR EVALUAT? OR ASSES?)
S10	96093	S9 AND (DIRECTION? OR PLACEMENT? OR POSITION? OR DISTANCE - OR FLOW? OR COORDINATE?? OR COORDINANT? OR XY OR EAST OR WEST OR NORTH OR SOUTH)
S11	66	AU=(WILKINSON, T? OR MEHLITZ, P? OR WILKINSON T? OR MEHLITZ P?)
S12	184680	IC=G06K?
S13	1269	CONVERT? AND S8
S14	371	(S1 OR S2) AND S5
S15	11	S14 AND (S6 OR S7)
S16	5	S15 AND (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? OR NUMERICAL OR NUMERAL??)
S17	28	S1 AND S13
S18	25	S17 AND S12
S19	24	S18 NOT S16
S20	1	S19 AND AD=20000814:20040819/PR
S21	23	S19 NOT S20
S22	23	IDPAT (sorted in duplicate/non-duplicate order)
S23	22	IDPAT (primary/non-duplicate records only)
S24	1	S11 AND S1
S25	993	S8 AND S10
S26	6	S25 AND (USER OR HAND) (3N) (DRAW? OR SCRIBBL? OR MOV? OR GE- STURE?)
S27	6	S26 NOT (S16 OR S20 OR S24)
S28	1008	S5 AND (S6 OR S7)
S29	339	S28 AND (INTEGER?? OR VALUE?? OR ASCII OR BINARY OR NUMBER? OR NUMERICAL OR NUMERAL??)
S30	58	S29 AND (S1 OR S2 OR S9)
S31	14	S30 AND S12
S32	10	S31 NOT (S26 OR S16 OR S20 OR S24)

16/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

07909001 **Image available**
CHARACTER RECOGNITION DEVICE AND CONTROL METHOD THEREOF

PUB. NO.: 2004-021760 [JP 2004021760 A]
PUBLISHED: January 22, 2004 (20040122)
INVENTOR(s): TOMIZAWA HIDEKI
OHASHI FUMIYASU
APPLICANT(s): TOSHIBA CORP
APPL. NO.: 2002-177935 [JP 2002177935]
FILED: June 19, 2002 (20020619)

ABSTRACT

...a method thereof capable of enhancing the input efficiency by enabling a person to easily **set** a detection-end **time** suitable for the person who performs a **hand - writing** input.

SOLUTION: This character recognition device having an input screen for inputting hand-written characters is characterized by being provided with a **coordinate** input means 21 for obtaining the **coordinate value** string of a character inputted in **handwriting**; a character recognition means 24 for recognizing the inputted character by reading the **coordinate value** string obtained by the **coordinate** input means as **stroke** data of character input; a setting means 25 for inputting a prescribed hand-written character...

... by the character recognition means, detecting the time of character input interval obtained by the **coordinate** input means, and setting an optimum detection-end time; and a means 22 for determining the character recognition candidate of the character recognition means according to the detection-end **time set** by the setting means.

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16/3,K/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

05121799 **Image available**
ON LINE RECOGNITION METHOD FOR HANDWRITTEN CHARACTER

PUB. NO.: 08-077299 [JP 8077299 A]
PUBLISHED: March 22, 1996 (19960322)
INVENTOR(s): UCHIYAMA TADASHI
HIRAIWA AKIRA
SONEHARA NOBORU
APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 07-006731 [JP 956731]
FILED: January 19, 1995 (19950119)

ABSTRACT

PURPOSE: To shorten a recognition time and reduce the amount of templates required to collate **handwriting** -inputted characters by representing time-series information on a pen point as a **coordinate** point of a **coordinate** system...

...CONSTITUTION: At the start of input processing, a **stroke number** (n) is set to 1 (S101) and the **handwriting** input of an (n)th **stroke** of a character is performed on a tablet digitizer (S102). While a pen tip is in contact with the tablet digitizer, the **coordinates** of the pen tip is recorded as time-series information on the pen point of the (n)th **stroke** (S104). Once the pen tip leaves the tablet digitizer, a noncontact time (r) begins to be measured (S105 to S107). The noncontact time (r) is compared with a set **value** R (S108) and when the noncontact **time** (r) exceeds the **set value** R, it is considered that the **handwriting** of all the **strokes** of the character ends and recognition processing is started. Consequently, the recognition time can be...

16/3,K/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

04889498 **Image available**
DEVICE AND METHOD FOR RECOGNIZING CHARACTER

PUB. NO.: 07-182098 [JP 7182098 A]
PUBLISHED: July 21, 1995 (19950721)
INVENTOR(s): KOYAMA KAZUO
SUZUKI KENJI
FURUICHI YOSHIO
TSUJIMOTO HIROBUMI
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
(Japan)
TOSHIBA COMPUT ENG CORP [486760] (A Japanese Company or
Corporation), JP (Japan)
APPL. NO.: 05-325298 [JP 93325298]
FILED: December 22, 1993 (19931222)

ABSTRACT

PURPOSE: To improve the input efficiency without the need of operations other than **handwriting** characters...

...CONSTITUTION: This device is provided with a **coordinate** input device 11 such as a tablet or the like for obtaining the **coordinate value** string of the handwritten and inputted character, a recognition processing part 25 for recognizing the inputted character by fetching the **coordinate value** string obtained in the **coordinate** input device 11 as the **stroke** data of character input, an input monitoring part 22 for detecting that the **coordinate value** string can not be obtained continuously for the fixed time in the **coordinate** input device 11, activating the recognition processing part by using the **coordinate value** string obtained until then and letting character recognition executed and an input monitoring, detecting and segmenting part 24 for detecting the presence/absence of the **coordinate value** string in the **coordinate** input device 11 with a **time interval set** beforehand, activating the recognition processing part 25 by using the **coordinate value** string obtained until then when a state without the input is counted for the specified **number** of times and letting the character recognition executed.

16/3,K/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

01784757 **Image available**
SETTING METHOD OF SCHEDULE

PUB. NO.: 60-263257 [JP 60263257 A]
PUBLISHED: December 26, 1985 (19851226)
INVENTOR(s): KOKUI SHINJI
 IGUCHI SHIGEKI
 INOUE TOMOHIRO
APPLICANT(s): SHARP CORP [000504] (A Japanese Company or Corporation), JP
 (Japan)
APPL. NO.: 59-119642 [JP 84119642]
FILED: June 11, 1984 (19840611)
JOURNAL: Section: P, Section No. 459, Vol. 10, No. 143, Pg. 164, May
 27, 1986 (19860527)

ABSTRACT

PURPOSE: To **set** a scheduled **time** in the same way as entering a schedule into a memobook, by inputting by **handwriting** the information of the time for executing a prescribed processing in accordance with a time...

...CONSTITUTION: If a **position** where an input with a pen has been executed is in a time zone column...

...inputted to a schedule information memory MS of an RAM. Also, if the pen input **position** is in a comment column, the information is written in the display use memory VRAM...

...a date, and a start time and an end time of the schedule by a **numerical value**, respectively. Also, as for the contents of the memory MC, a date and comment information...

... information, information written with a pen is recorded in an information compressed format as a **stroke** and vector information. Also, the contents of the memory MS and MC can be reproduced...

16/3,K/5 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

004591843
WPI Acc No: 1986-095187/198615
XRPX Acc No: N86-069763

Automatic editing and adjustment system for handwritten text images -
uses processing algorithm to identify groups and to smooth random
fluctuations in handwritten information

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); IBM CORP (IBMC)
Inventor: FOX A S; GREANIAS E C; KIM J; TAPPERT C; TAPPERT C C
Number of Countries: 006 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 176715	A	19860409				198615 B
CA 1223366	A	19870623				198729
US 4727588	A	19880223	US 86917280	A	19861009	198811
EP 176715	B1	19920715	EP 85110144	A	19850813	199229
DE 3586342	G	19920820	DE 3586342	A	19850813	199235
			EP 85110144	A	19850813	

Priority Applications (No Type Date): US 84655174 A 19840927
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 176715	A	E	35		
				Designated States (Regional): DE FR GB IT	
EP 176715	B1	E	21	G06F-015/66	
				Designated States (Regional): DE FR GB IT	
DE 3586342	G			G06F-015/66	Based on patent EP 176715

...Abstract (Basic): an x-y tablet (80) and stylus (84) inputting a handwritten image as X-Y **coordinate** signals for display on a screen or other output device. The processing algorithm includes logic for collocating the **coordinate** signals into gross discrete groups, but without identifying the data significance of such groups - corresponding...

...Structural data is determined from the **coordinate** signals relating to each group and to sets of such groups. From this data, the...

...Abstract (Equivalent): type in which an input stylus (84) is used to enter a series of handwritten **strokes** into an x-y tablet (80) wherein the **strokes** are converted into **coordinate** signals, said series of **strokes** later being segmented into a series of words for display on a display screen, said system being characterised by: a **stroke** extremity detector (12) to store current extremity **values** of a new **stroke** during a **period** of **time** when said input stylus (84) is in contact with said tablet (80), the current extremity **values** being obtained from the maximum and minimum components of the **coordinate** signals corresponding to said **stroke**; a compare system (14) for receiving said current extremity **values** and comparing same with old extremity **values** corresponding to a present word and obtained from a word extremity memory (19), so as to determine whether said new **stroke** lies outside a predetermined zone of proximity derived from said old extremity **values**; wherein if said new **stroke** lies within said zone it is classed as forming part of said present word, and if said new **stroke** lies outside said zone it is classed as the first **stroke** of a new word, said present word then being classed as a preceding word.
(Dwg...

...Title Terms: **HANDWRITING** ;

?

23/3,K/1 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

014213351 **Image available**
WPI Acc No: 2002-034049/200204
XRPX Acc No: N02-026253

**Radiotelephone has handwritten character recognition device with
processor for processing sequence of digital values to recognize
alphanumeric character corresponding to handwritten strokes of user**
Patent Assignee: ERICSSON INC (TELF)
Inventor: DOUB M D; KIM S K
Number of Countries: 095 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200131567	A1	20010503	WO 2000US40766	A	20000829	200204	B
AU 200080359	A	20010508	AU 200080359	A	20000829	200204	
EP 1224611	A1	20020724	EP 2000971068	A	20000829	200256	
			WO 2000US40766	A	20000829		
US 6477274	B1	20021105	US 99425637	A	19991022	200276	
JP 2003513539	W	20030408	WO 2000US40766	A	20000829	200333	
			JP 2001534075	A	20000829		
CN 1413334	A	20030423	CN 2000817500	A	20000829	200347	
EP 1224611	B1	20040804	EP 2000971068	A	20000829	200451	
			WO 2000US40766	A	20000829		

Priority Applications (No Type Date): US 99425637 A 19991022

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 200131567	A1	E 33	G06K-009/22	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW				
AU 200080359	A			Based on patent WO 200131567
EP 1224611	A1	E	G06K-009/22	Based on patent WO 200131567
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI				
US 6477274	B1		G06K-009/28	
JP 2003513539	W	27	H04M-001/02	Based on patent WO 200131567
CN 1413334	A		G06K-009/22	
EP 1224611	B1	E	G06K-009/22	Based on patent WO 200131567
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE				

**Radiotelephone has handwritten character recognition device with
processor for processing sequence of digital values to recognize
alphanumeric character corresponding to handwritten strokes of user**

Abstract (Basic):

... located in a array (42) produces respective different analog
voltages in response to hand-written **stroke** of the user. An A/D
converter (44) **converts** sequence of analog voltage signals into a
sequence of digital **values** which is processed to recognize an
alphanumeric character corresponding to handwritten **stroke** of user by
processor (46).

... A/D **converter** (44...

...Title Terms: **HANDWRITING** ;

International Patent Class (Main): G06K-009/22 ...

... G06K-009/28
...International Patent Class (Additional): G06K-009/00 ...
... G06K-009/62

23/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

011890875 **Image available**
WPI Acc No: 1998-307785/199827
XRPX Acc No: N98-241953

Hand writing letter symbol search apparatus for electronic note book,
tablet, PC, NP - in which object block row whose difference degree
accumulated within object block row, is removed from search group, when
it exceeds predetermined value

Patent Assignee: SHARP KK (SHAF)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 10111912	A	19980428	JP 96267571	A	19961008	199827 B

Priority Applications (No Type Date): JP 96267571 A 19961008
Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 10111912	A	24	G06K-009/62	

Hand writing letter symbol search apparatus for electronic note book,
tablet, PC, NP...

...degree accumulated within object block row, is removed from search
group, when it exceeds predetermined value

...Abstract (Basic): all cut to suitable block rows. A dictionary stores
the shape and position of a **stroke** for every block. The CPU **converts**
the block code for the **stroke** row, based on the contents of the
dictionary. The **converted** block code is matched with **number** of
drawings in the block and is stored in a RAM. The difference degree
between **number** of drawings of the block of a search key and the
number of drawings of the block for search, registered beforehand...

...The **number** of drawings and the difference degree of block code for
object block row, is then...

...in the RAM. When the difference degree of the object block row exceeds a
predetermined **value** , that particular row is removed from the search
group. The block row accumulated within the object block row with
difference degree exceeding the predetermined **value** , is also removed
from the candidate group...

...Title Terms: **VALUE**
International Patent Class (Main): G06K-009/62
International Patent Class (Additional): G06K-009/46

23/3,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

011885504 **Image available**

WPI Acc No: 1998-302414/199827

XRPX Acc No: N98-236990

Handwritten character recognition apparatus - has character recognition unit that changes number of division of input image data according to input number of handwriting strokes

Patent Assignee: BROTHER KOGYO KK (BRER)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 10105651	A	19980424	JP 96260483	A	19961001	199827 B

Priority Applications (No Type Date): JP 96260483 A 19961001

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 10105651	A	6	G06K-009/62	

... **has character recognition unit that changes number of division of input image data according to input number of handwriting strokes**

...Abstract (Basic): The apparatus (22) has a **handwriting** character input unit that inputs a **handwriting stroke** during the inputting of a character via **handwriting** , and image data based on the **handwriting stroke** . A character recognition unit (18) divides the input image data and extracts the characteristic of each partition, to recognise and **convert** the input character into a character code...

...A display shows the recognised character. The **number** of division of the image data is changed by the character recognition unit corresponding to the **number** of input of **handwriting strokes** .

...

...high character recognition accuracy. Enables high-speed character recognition since recognition dictionary is decided with **number** of drawings

Title Terms: **HANDWRITING** ;

International Patent Class (Main): **G06K-009/62**

23/3,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

011048215 **Image available**

WPI Acc No: 1997-026139/199703

XRPX Acc No: N97-021933

On-line handwriting character recognition method - involves performing character recognition using character recognition dictionary based on conversion of input strokes using stroke conversion dictionary

Patent Assignee: NIPPON STEEL CORP (YAWA)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8287185	A	19961101	JP 9586822	A	19950412	199703 B

Priority Applications (No Type Date): JP 9586822 A 19950412

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 8287185	A	13	G06K-009/46	

On-line handwriting character recognition method...

...involves performing character recognition using character recognition

**dictionary based on conversion of input strokes using stroke
conversion dictionary**

...Abstract (Basic): of handwritten data input by a user by referring to a character recognition dictionary. The **stroke** contained in the data is considered as an input **stroke**. A set of **strokes** of the same type are collected in a decomposition **stroke** group. The conversion of these **strokes** is performed using a **stroke** conversion dictionary. The pointers corresponding to the **strokes** collected in the **stroke** group are stored in a **stroke** recognition dictionary...

...Based on the **value** of the pointer, the conversion dictionary **converts** the **strokes** (103). The input **stroke** is replaced by the corresponding decomposition **stroke** group (106). Finally, the character recognition is performed using the character recognition dictionary (108-111...

...Title Terms: **HANDWRITING** ;

International Patent Class (Main): **G06K-009/46**

...International Patent Class (Additional): **G06K-009/68**

23/3,K/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010696032 **Image available**

WPI Acc No: 1996-192987/199620

XRPX Acc No: N96-161603

**Document creation device for handwriting input - provides display
device for displaying converted character code**

Patent Assignee: TOSHIBA KK (TOKE)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8063551	A	19960308	JP 94194330	A	19940818	199620 B

Priority Applications (No Type Date): JP 94194330 A 19940818

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 8063551 A 6 G06K-009/62

Document creation device for handwriting input...

...provides display device for displaying converted character code

...Abstract (Basic): The device consists of a coordinates data entry part (31) which produces the **handwriting** input as a coordinates data. A coordinates data memory (32) stores the produced coordinates data. A **number** input part (34) of **stroke** drawings inputs a **number** of **stroke** drawings of the **handwriting** character, which is input into the coordinates data entry part...

...A character recognition part (33) reads the coordinates data corresponding to the **number** of **stroke** drawings from the coordinates data memory. It recognises the coordinates pattern from the read coordinates data and **converts** it to a character code. A display device (35) displays the **converted** character code...

...ADVANTAGE - Recognises input character with many **stroke** drawings. Enables every input character to be read correctly as **converted** character code is displayed...

...Title Terms: **HANDWRITING** ;
International Patent Class (Main): **G06K-009/62**
International Patent Class (Additional): **G06K-009/34**

23/3,K/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

010604765 **Image available**
WPI Acc No: 1996-101718/199611
XRPX Acc No: N96-085148

Handwritten character recognition input unit for word processor, computer input - has display unit to display input frames in which additional frame is displayed to same size of previous frame

Patent Assignee: SHARP KK (SHAF)
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8007034	A	19960112	JP 94142011	A	19940623	199611 B
JP 3025152	B2	20000327	JP 94142011	A	19940623	200020

Priority Applications (No Type Date): JP 94142011 A 19940623

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8007034	A		10	G06K-009/03	
JP 3025152	B2		11	G06K-009/62	Previous Publ. patent JP 8007034

...Abstract (Basic): generally formed on a screen to input a handwritten character from any desired position. A **number** of input frames, more than the display of recognition characters, are formed on the position
...

...detected by coordinates detector by detecting the coordinate data consisting of dots along the pen **strokes** . The coordinates data are stored in coordinates data memory...

...frame. For input of handwritten character of expanded size, the frame control unit arranges a **number** of input frame in sequence. Once the input character is **converted** to the standard recognised character, the corresponding input frame is erased. Any additional frame displayed
...

...workstation, portable terminal and electronic notebook. Regulates frame size as per user's requirement. Carries **handwriting** input with sensation of writing on paper. Corrects undesirable, accidental pen **strokes** by rewriting. Improves user's operativity...

Title Terms: **HANDWRITING** ;
International Patent Class (Main): **G06K-009/03** ...

... **G06K-009/62**
International Patent Class (Additional): **G06K-009/62**

23/3,K/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

010464733 **Image available**
WPI Acc No: 1995-366052/199547

XRPX Acc No: N95-270885

On-line handwritten English character recognition method - using hidden Markov models (HMMs) with input data represented as chain codes and HMMs trained in character units for recognition

Patent Assignee: KIM J (KIMJ-I)

Inventor: HA J; KIM J; OH S

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5459809	A	19951017	US 93121494	A	19930916	199547 B
KR 9513127	B1	19951025	KR 933917	A	19930315	199901

Priority Applications (No Type Date): KR 933917 A 19930315

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5459809	A		31	G06K-009/66	
KR 9513127	B1			G06F-017/28	

...Abstract (Basic): recognize individual character units. The character units are entered and fitted with first corresponding imaginary **strokes**, preprocessed and **converted** into corresponding sequences of first chain codes which are represented in first hidden Markov models
...

...the character units. The ligatures are entered into the system, fitted with second corresponding imaginary **strokes**, preprocessed, **converted** into corresponding sequences of second chain codes which are represented in second hidden Markov models...

...by the input data is recognised by entering it, fitting it with third corresponding imaginary **strokes**, preprocessing and **converting** it into corresponding sequences of third chain codes which are passed through the circularly connected...

...USE/ADVANTAGE - For cursive script characters, precise recognition of words of arbitrary **number** of written characters without additional separator...

...Title Terms: **HANDWRITING** ;

...International Patent Class (Main): **G06K-009/66**

23/3,K/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010353408 **Image available**

WPI Acc No: 1995-254722/199533

XRPX Acc No: N95-196678

Information medium recognition device for handwriting - scans information medium in different scanning directions, detects stroke density per direction, inference portion converts stroke density into compressed fuzzy density and judges if medium is genuine

Patent Assignee: NIPPONDENSO CO LTD (NPDE)

Inventor: FURUHASHI T; OBATA K; UCHIKAWA Y; WATANABE S

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5432868	A	19950711	US 9365235	A	19930521	199533 B
JP 3013618	B2	20000228	JP 92211267	A	19920807	200015

Priority Applications (No Type Date): JP 92211267 A 19920807

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5432868	A	24	G06K-009/00		
JP 3013618	B2	15	G06T-007/00		Previous Publ. patent JP 6060168

Information medium recognition device for handwriting - ...

...scans information medium in different scanning directions, detects stroke density per direction, inference portion converts stroke density into compressed fuzzy density and judges if medium is genuine

...Abstract (Basic): portion (203) scans the addresses of the image pixels in different scanning directions. It detects **stroke** densities corresponding to each of the scanning directions. It causes the memory to output a...

...counts intersecting points and character lines at the time of scanning. Hence it obtains the **stroke** densities in each scanning direction...

...The CPU (211) performs a fuzzy inference process in each scanning direction. It **converts** the **stroke** density obtained by the counting portion into fuzzy density. The **number** of fuzzy densities in each scanning direction is less than the **number** of **stroke** densities. It is equal to the fuzzy rules preliminarily established for **converting** the **stroke** densities into the compressed fuzzy densities. The fuzzy portion (208) judges if the medium is...

...Title Terms: **HANDWRITING** ;

International Patent Class (Main): G06K-009/00 ...

23/3,K/9 (Item 9 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

010230234 **Image available**

WPI Acc No: 1995-131491/199517

XRPX Acc No: N95-103298

Symbolic based recognition system for handwriting input - has data base memory which stores compilation of text and pattern pairs and processor which compares patterns with sample patterns to derive text

Patent Assignee: EFFICIENCY SOFTWARE INC (FFIC-N); PENKEY CORP (PENK-N)

Inventor: CARMAN F C

Number of Countries: 021 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9508158	A1	19950323	WO 94US10682	A	19940916	199517 B
AU 9478000	A	19950403	AU 9478000	A	19940916	199529
US 5454046	A	19950926	US 93123609	A	19930917	199544

Priority Applications (No Type Date): US 93123609 A 19930917

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9508158	A1	E	51	G06K-009/00	

Designated States (National): AU BR CA JP

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

AU 9478000	A		G06K-009/00	Based on patent WO 9508158
US 5454046	A	32	G06K-009/00	

Symbolic based recognition system for handwriting input...

...Abstract (Basic): The system (24) **converts** user entered time ordered

stroke sequences (18) into computer (26) readable text. The system operates on two levels. On the first word level recogniser it recognises an entire group of **strokes** as a unit. On the second parser level recogniser it breaks the **strokes** into segments and recognises groups of **stroke** segments within a word...

...ADVANTAGE - System recognises users own **handwriting** rather than requiring user to write in certain way to enable computer to recognise writing...

...Abstract (Equivalent): A system for the symbolic-based recognition of a **handwriting** input to an input surface having an output provided as a stream of coordinate data...

...pattern pairs, said pattern of each pair having been derived as sample features of said **handwriting** and including an associated sample index derived as aspects of said **handwriting** sample features, said text of each said pair representing at least one predetermined character glyph
...

...said pattern sample and test features including index based features derived from the **stroke** defining sequences of said data points representing a word and comprising...

...a first index component provided as a **value** corresponding with the total **number** of **strokes** comprising a word...

...a second index component provided as a **value** corresponding with the **number** of inflection points of a **stroke**, wherein such inflection points comprise a significant bend in a **stroke**, a top location, a bottom location and a baseline crossing point in the **stroke**, and...

...a third index component provided as a **value** corresponding with the termination of inflection point index components for a given **stroke**; and...

...Title Terms: **HANDWRITING** ;

International Patent Class (Main): G06K-009/00

23/3,K/10 (Item 10 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

010152129 **Image available**

WPI Acc No: 1995-053381/199508

XPX Acc No: N95-041982

Character input method with on-line character recognition - using input unit to sense movement characteristics and form meta attribute applied to associative memory to extract character

Patent Assignee: INT BUSINESS MACHINES CORP (IBM)

Inventor: BEZEK J D

Number of Countries: 004 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 632401	A2	19950104	EP 94109712	A	19940623	199508 B
US 5390260	A	19950214	US 9384658	A	19930628	199512
EP 632401	A3	19951102	EP 94109712	A	19940623	199617

Priority Applications (No Type Date): US 9384658 A 19930628

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 632401	A2	E	18	G06K-009/22	

Designated States (Regional): DE FR GB
US 5390260 A 15 G06K-009/00
EP 632401 A3 G06K-009/22

...Abstract (Basic): capable of sensing relative motion. This may a mouse, pen or other similar unit. A **number** of processors (15-17) continuously monitor the input unit to detect movement attributes. These can include turns, weighted input centre and **stroke** geometry or topology...

...Abstract (Equivalent): attribute of the sensed input. Exemplary meta attributes include the turns, weighted input center, and **stroke** geometry and topology. The meta-attribute is continuously updated and formed into an updated multi...

...USE/ADVANTAGE - For **converting** alphanumeric input into input to application program as a text processing or word processing program...

...associative memory for on-line character recognition. Provides on-line, real time character recognition of **handwriting** in distributed processor...

International Patent Class (Main): G06K-009/22

23/3,K/11 (Item 11 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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009588647 **Image available**
WPI Acc No: 1993-282193/199336
XRPX Acc No: N93-216824

Computer input appts. for interface with handwritten data - generates three-dimensional weighting function from users handwritten input data which is used to determine output display by projecting weighting function to bit map space

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: MINAKATA H

Number of Countries: 005 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 559353	A2	19930908	EP 93301158	A	19930217	199336 B
US 5568565	A	19961022	US 9355436	A	19930429	199648
KR 122852	B1	19971121	KR 931590	A	19930205	199950
EP 559353	B1	20010816	EP 93301158	A	19930217	200147
DE 69330576	E	20010920	DE 630576	A	19930217	200163
			EP 93301158	A	19930217	

Priority Applications (No Type Date): JP 9248287 A 19920305

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 559353	A2	E	21	G06F-003/033	
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Designated States (Regional): DE FR GB

US 5568565	A	18	G06K-009/00
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KR 122852	B1	G06T-007/00
-----------	----	-------------

EP 559353	B1	E	G06F-003/033
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Designated States (Regional): DE FR GB

DE 69330576	E	G06F-003/033	Based on patent EP 559353
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...Abstract (Basic): USE/ADVANTAGE - for computer pen **handwriting** input interface i.e. sketch-like free graphic input operation. Automatically generates one appropriate line...

...Abstract (Equivalent): A method for receiving **strokes** handwritten on an input/output screen and displaying a line segment on said screen, said...

...receiving a **stroke** input by writing by hand with a pen on a first area of an input...

...associating with each point of said **stroke** a plurality of parameters by...

...detecting the pen- **stroke** pressure P of said **stroke**
 ...

...detecting the pen velocity V of said **stroke** ;
 ...

...detecting the **number** of times N previous **strokes** have been input in said local area...

... **converting** P, V and N to a plurality of parameters wherein the following parameters are calculated...

...user has intention of repeatedly writing a line segment, Rf being a function of the **number** of previous **strokes** input into said local area...

...parameters to generate a three-dimensional weighting function, said weighting function associated with said input **stroke** ;
 ...

...reading from a memory means a stored weighting function associated with a previously input **stroke** , said previous **stroke** input in a local area on said input/output screen, said local area being an...

...adding said weighting function associated with said input **stroke** and said stored weighting function, said result of said addition being a generated weighting function

...Title Terms: **HANDWRITING** ;

...International Patent Class (Main): G06K-009/00

International Patent Class (Additional): G06K-009/22 ...

... G06K-009/46

23/3,K/12 (Item 12 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
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009496672
 WPI Acc No: 1993-190208/199324
 XRPX Acc No: N93-146181

Handwritten character recognition system for e.g. Japanese kanji -
 creates characteristic amount word having one possibility of binary
 value and performs bit-by-bit AND operation between reference word of
 corresp. stroke and OR operation for all bit results

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: KITAMURA K

Number of Countries: 004 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 546860	A2	19930616	EP 92311352	A	19921211	199324 B

EP 546860 A3 19940511 EP 92311352 A 19921211 199524
US 5426711 A 19950620 US 92957334 A 19921006 199530

Priority Applications (No Type Date): JP 91327680 A 19911211

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 546860 A2 E 11 G06K-009/64

Designated States (Regional): DE FR GB

US 5426711 A 9 G06K-009/00

EP 546860 A3 G06K-009/64

... creates characteristic amount word having one possibility of binary value and performs bit-by-bit AND operation between reference word of corresp. stroke and OR operation for all bit results

...Abstract (Basic): The data processing system receives locus data of a handwritten character. Locus data representing each **stroke** of a character is **converted** into a respective input character work of a predetermined bit width. A reference character word is stored for each **stroke** of a character to be recognised. The reference character word has the same bit width...

...Abstract (Equivalent): processing of a small amount of operations. A predetermined characteristic amount is extracted for each **stroke**, a characteristic amount word is created having a **binary value** of 1 only in one or more bit positions corresponding to selected **values** of the characteristic amount, an AND operation is performed bit-by-bit between the reference word of the corresponding **stroke** of the character of interest, and it is determined if all the bits of the...

...If the **number** of **binary values** of the results of the zero-determining operation for all the **strokes** of the character of interest exceeds a threshold, it is judged to be a candidate...

...characters quickly, accurately and stably for handwritten characters including various character types and variation in **number** of **strokes** and **stroke** order, by simple processing and small **number** of operations. Can automatically create a dictionary for the narrowing process from collected handwritten character...

Title Terms: **HANDWRITING** ;

International Patent Class (Main): **G06K-009/64**

23/3,K/13 (Item 13 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009450670 **Image available**

WPI Acc No: 1993-144195/199317

XRFX Acc No: N93-110081

Method of extracting feature from line pattern and pattern recognition for e.g. hand writing - decomposing singular points defined as vertex to which three or more branches are connected and generating strokes due to finding of pairs of vertices regarded as identical

Patent Assignee: RICOH KK (RICO)

Inventor: NISHIDA H

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5204915	A	19930420	US 90584800	A	19900919	199317 B

Priority Applications (No Type Date): JP 89245507 A 19890921

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
US 5204915 A 21 G06K-009/48

Method of extracting feature from line pattern and pattern recognition for e.g. hand writing - ...

...singular points defined as vertex to which three or more branches are connected and generating strokes due to finding of pairs of vertices regarded as identical

...Abstract (Basic): line pattern involves extracting a thinned line from the line pattern, finding one or a number of singular points which are formed on the thinned line, decomposing each of the singular points into a number of vertices, and generating strokes due to the finding of pairs of the vertices, which are regarded as identical to...

...Each of the strokes are converted into a primitive sequence obtained by a concatenation of primitives, and a binary relation between each two primitive sequences obtained are generated. The line pattern is featured by a combination of primitive sequences obtained and the binary relation between each of the primitive sequences...

...Title Terms: STROKE ;

International Patent Class (Main): G06K-009/48

23/3,K/14 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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009197569 **Image available**
WPI Acc No: 1992-325001/199240
WRPX Acc No: N92-248440

Integrated recognition system for speech and handwriting - decodes both speech and handwriting to produce sets of multidimensional vectors to train set of word models for message recognition

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC)

Inventor: BELLEGARDA J R; KANEVSKY D

Number of Countries: 004 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 505621	A2	19920930	EP 91121181	A	19911210	199240 B
EP 505621	A3	19930602	EP 91121181	A	19911210	199404
US 6285785	B1	20010904	US 91676601	A	19910328	200154
			US 92856803	A	19920324	
			US 9373091	A	19930607	

Priority Applications (No Type Date): US 91676601 A 19910328; US 92856803 A 19920324; US 9373091 A 19930607

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
EP 505621 A2 E 20 G10L-005/06

Designated States (Regional): DE FR GB

EP 505621 A3 G10L-005/06

US 6285785 B1 G06K-009/00 Cont of application US 91676601
Cont of application US 92856803

Integrated recognition system for speech and handwriting - ...

...decodes both speech and handwriting to produce sets of multidimensional vectors to train set of word models for message recognition

...Abstract (Basic): The system includes a microphone for **converting** a user's speech to an electrical signal and a digitising tablet for **converting** a user's **handwriting** to another electrical signal. The signals are each **converted** into a **number** of multi-dimensional vectors and may be used singly or in combination to decode a...

...models for joint use, or two single sets for sequentially employed or merged speech and **handwriting** .

...
...ADVANTAGE - Provides method for sequentially using speech or **handwriting** inputs in error connecting techniques for each other. Exploits complementary acoustic and **stroke** information for improved method recognition accuracy

...Title Terms: **HANDWRITING** ;

International Patent Class (Main): G06K-009/00 ...

23/3,K/15 (Item 15 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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008376159 **Image available**
WPI Acc No: 1990-263160/199035
XRPX Acc No: N90-203838

Encoding and decoding Chinese characters - converts strokes of character in sequence conforming with Chinese handwriting rules a stroke code

Patent Assignee: PONTECH INC (PONT-N); KIM P (KIMP-I)

Inventor: PONG G

Number of Countries: 005 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2228604	A	19900829	GB 9038969	A	19900221	199035 B
CN 1045307	A	19900912				199121
GB 2228604	B	19930421	GB 903896	A	19900221	199316
US 5212769	A	19930518	US 89313888	A	19890223	199321
			US 90477327	A	19900208	
CN 1024050	C	19940316	CN 90101470	A	19900223	199525
KR 163178	B1	19990115	KR 902322	A	19900223	200036
JP 3292372	B2	20020617	JP 9044276	A	19900223	200242

Priority Applications (No Type Date): US 90477327 A 19900208; US 89313888 A 19890223

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2228604	B			H03M-011/00	
US 5212769	A	27		G06F-015/66	CIP of application US 89313888
CN 1024050	C			G06F-003/00	
KR 163178	B1			G06F-003/02	
JP 3292372	B2	21		G06K-009/62	Previous Publ. patent JP 2289100

... converts strokes of character in sequence conforming with Chinese handwriting rules a stroke code

...Abstract (Basic): to enter data pertaining to the initial order or sequence of occurrence and the total **number** of occurrence of each type of basic **stroke** , to enter the additional code element corresponding to a character being displayed, and for controlling...

...Abstract (Equivalent): means to operate in one of three different modes

for entering a sequence of basic **stroke** elements corresponding to a character being entered, in a sequential order conforming at least initially to **handwriting** rules of the ideographic characters, the basic **stroke** elements being of only three types, namely a horizontal **stroke** element, a vertical **stroke** element...

...and a slant **stroke** element /, and a plurality of second actuating members for entering selection signals; (b) processing means responsive to a said **stroke** element sequence entered at the entry means for deriving a character **stroke** code indicative of the order of initial occurrence of different types of the basic **stroke** elements and the total **number** of occurrence of each basic **stroke** element type in said sequence, and for retrieving characters according to the derived character **stroke** code from memory means storing a character set which comprises a multiplicity of the ideographic characters each corresponding to a respective character **stroke** code; and (c) display means responsive to the processing means for displaying characters retrieved from the memory means, corresponding to the character **stroke** code derived by the processing means; wherein said second actuating members for entering selection signals...

...each of a plurality of retrieved characters displayed on the display means when the character **stroke** code derived by the processing means corresponds to more than one character in the character...

...and the processing means is responsive to said selection signal for deriving an extended character **stroke** code which uniquely corresponds to a selected character.

...Abstract (Equivalent): encoding and decoding Chinese characters comprises an entry device for entering a sequence of basic **stroke** elements into which the **strokes** of a corresp. Chinese character being entered are decomposed in a sequence conforming at least initially to Chinese **handwriting** rules. A processor responsive to the entry derives a character **stroke** code indicative of the order of initial occurrence of different types of basic **stroke** elements and the total **number** of occurrences of each element. The processor includes a memory for storing a character set...

...to the processor displays each character of the character set corresp. to the derived character **stroke** code. The entry device includes a device for selecting one of the characters being displayed if the derived character **stroke** code corresponds to more than one character of the character set...

...Method. User does not need to process high level of skill in written Chinese language. **Stroke** sequence need not be rigorously followed except for first few **strokes**.

...Title Terms: **CONVERT** ;

...International Patent Class (Main): **G06K-009/62**

23/3,K/16 (Item 16 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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007667359 **Image available**
WPI Acc No: 1988-301291/198843
XRPX Acc No: N88-228668

Discriminator for handwritten and machine-printed characters - detects ratio of slanted components to total number of strokes and determines whether above or below ratio of 0.2

Patent Assignee: NEC CORP (NIDE)

Inventor: KASUYA S; UMEDA T

Number of Countries: 005 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 288266	A	19881026	EP 88303558	A	19880420	198843 B
US 4910787	A	19900320	US 88182518	A	19880418	199017
EP 288266	B1	19930317	EP 88303558	A	19880420	199311
DE 3879254	G	19930422	DE 3879254	A	19880420	199317
			EP 88303558	A	19880420	

Priority Applications (No Type Date): JP 8795268 A 19870420

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 288266	A	E	8		
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Designated States (Regional): DE FR GB NL

EP 288266	B1	E	9	G06K-009/00	
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Designated States (Regional): DE FR GB NL

DE 3879254	G			G06K-009/00	Based on patent EP 288266
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... detects ratio of slanted components to total number of strokes and determines whether above or below ratio of 0.2

...Abstract (Basic): A video image of a region including characters recorded on a document is **converted** into electric signals (j). From the electric signals, unit signals (a-i) are picked up corresponding to subregions obtained by dividing the image region. Horizontal vertical and slanted **stroke** components (K,l,m) in each of the subregions are detected from the unit signals by a pattern detector (2). The detected **numbers** of the different components are counted by counters (3,4,5). The ratio (q) of the counted **numbers** of the slanted **stroke** component (p) to the total of the horizontal, vertical and slanted **stroke** components (n + r + p) is calculated by a circuit (b...

...Abstract (Equivalent): the previous sub-region in the succession of sub-regions, means (2) for detecting horizontal **stroke**, vertical **stroke** and slanted **stroke** components included in each of the extracted unit pattern signal sets, horizontal, vertical and slanted **stroke** counters (3, 4, 5) for counting the **numbers** of detections of the horizontal, vertical and slanted **stroke** components respectively, means (6) for calculating the ratio R of the output of the slanted **stroke** counter (5) to the sum of the outputs of all of the horizontal, vertical and slanted **stroke** counters (3, 4, 5), and means (6) for discriminating the characters as handwritten ones and...

...Abstract (Equivalent): A video image of a region including characters recorded on a document is **converted** into electric signals. From the electric signals unit signals corresp. to subregions obtained by dividing the region is picked up. Horizontal, vertical and slanted **stroke** components included in each of the subregions are detected from the unit signals. The detected **numbers** of the horizontal, vertical and slanted **stroke** components are counted. The ratio of the counted **numbers** of the slanted **stroke** component to the total of the horizontal, vertical and slanted **stroke** components is calculated. The characters on the document is judged as handwritten ones and machine...

...Title Terms: **HANDWRITING** ;

International Patent Class (Additional): G06K-009/68

23/3,K/17 (Item 17 from file: 347)

DIALOG(R)File 347:JAPIO

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05737895 **Image available**
DEVICE AND METHOD FOR RECOGNIZING **HANDWRITING** CHARACTER

PUB. NO.: 10-020995 [JP 10020995 A]
PUBLISHED: January 23, 1998 (19980123)
INVENTOR(s): ARAI TSUNEICHI
APPLICANT(s): CANON INC [000100] (A Japanese Company or Corporation), JP
 (Japan)
APPL. NO.: 08-194101 [JP 96194101]
FILED: July 05, 1996 (19960705)

DEVICE AND METHOD FOR RECOGNIZING **HANDWRITING** CHARACTER

INTL CLASS: G06F-003/03; **G06K-009/62**

ABSTRACT

...SOLUTION: The gesture of **handwriting** is discriminated from a **handwriting** character based on coordinate data from the position of an input means by using the input means for **converting handwriting** by a **handwriting** pen into position coordinate data. Then, a recognized result is outputted by collating position coordinate data of the **handwriting** of the inputted handwritten character with the standard character pattern of a dictionary. The **number** of the characters to be outputted is decided in accordance with the length of the **stroke** of the gesture on inputted **handwriting**. The decided **number** of the characters written immediately before the gesture are outputted.

23/3,K/18 (Item 18 from file: 347)
DIALOG(R)File 347:JAPIO
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02755683 **Image available**
HANDWRITTEN CHARACTER INPUT DEVICE

PUB. NO.: 01-053283 [JP 1053283 A]
PUBLISHED: March 01, 1989 (19890301)
INVENTOR(s): YAMAUCHI KOJI
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP
 (Japan)
APPL. NO.: 62-210539 [JP 87210539]
FILED: August 24, 1987 (19870824)
JOURNAL: Section: P, Section No. 884, Vol. 13, No. 256, Pg. 66, June
 14, 1989 (19890614)

INTL CLASS: **G06K-009/62** ; **G06K-009/68**

ABSTRACT

PURPOSE: To raise the recognition efficiency of a handwritten character by providing a **hand writing** input part, an internal dictionary memory part recognizing the inputted handwritten character, a tablet having a display part which displays the character after being **converted**, and a read/write function reading and writing an optical memory card in using as...
...CONSTITUTION: The **hand writing** input part, the internal dictionary memory part recognizing the inputted handwritten character, the tablet 2 having the display part which displays the character after being **converted** and the read/ write function 3 reading and writing the optical memory card 5 is...

... optical memory card 5 besides the internal dictionary memory part recognizing a standard spelling and **stroke number** . Thus the recognition efficiency of the handwritten character can be raised.

23/3,K/19 (Item 19 from file: 347)

DIALOG(R)File 347:JAPIO

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01784775 **Image available**

CHARACTER RECOGNIZING DEVICE

PUB. NO.: 60-263275 [JP 60263275 A]

PUBLISHED: December 26, 1985 (19851226)

INVENTOR(s): YOSHIDA KAZUNAGA

APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP
(Japan)

APPL. NO.: 59-119607 [JP 84119607]

FILED: June 11, 1984 (19840611)

JOURNAL: Section: P, Section No. 460, Vol. 10, No. 147, Pg. 3, May 29,
1986 (19860529)

INTL CLASS: G06K-009/62

ABSTRACT

... by discriminating the existence of the semivoiced sound symbol based on a size of one **stroke** for constituting a character and the existence of a loop in its **stroke** .

...
...CONSTITUTION: **Handwriting** of a character written on a tablet 61 is **converted** to an (x)(y) coordinate **value** at prescribed time intervals, and an (x)(y) data of one character portion is inputted...

... by a constant .alpha. by a constant multiplying part 65, and outputted as a reference **value** .alpha..l(sub 0). Next, an (x)(y) data of each **stroke** is read out of the memory 62, and a size l(sub n) of the **stroke** is derived through a detecting part 63 and a **stroke** size calculating part 66, and compared with the reference **value** .alpha..l(sub 0). In case of its result is l(sub n)<=.alpha..l...

... sound symbol candidate example, and the semivoiced sound symbol can be detected exactly through a **stroke** center calculating part 68, directional angle calculating part 69, directional angle maximum and minimum detecting

23/3,K/20 (Item 20 from file: 347)

DIALOG(R)File 347:JAPIO

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01546179 **Image available**

STROKE DETECTING SYSTEM IN CHARACTER READER

PUB. NO.: 60-024679 [JP 60024679 A]

PUBLISHED: February 07, 1985 (19850207)

INVENTOR(s): YAMASHITA SHOZO

INOUE TERUAKI

NAGAO MINORU

NASUHARA NOBUKAZU

APPLICANT(s): OMRON TATEISI ELECTRONICS CO [000294] (A Japanese Company or

Corporation), JP (Japan)
APPL. NO.: 58-133255 [JP 83133255]
FILED: July 21, 1983 (19830721)
JOURNAL: Section: P, Section No. 366, Vol. 09, No. 148, Pg. 23, June
22, 1985 (19850622)

STROKE DETECTING SYSTEM IN CHARACTER READER

INTL CLASS: G06K-009/46

ABSTRACT

PURPOSE: To detect a **stroke** at a high speed even if a line width is thick by detecting a sub- **stroke** from the continuity of a boundary mesh, and classifying plural sub- **strokes** as one based on an extending condition and a pair condition...

...CONSTITUTION: A **handwriting** character written in an original 100 is photoelectrically **converted** by an image pickup device 101, **binary** -coded by an A/D **converter** 102 and written in an original picture memory RAM1. Subsequently, the continuity of a boundary...

... as a substroke, also classified into eight kinds in accordance with the part of a **stroke** it is positioned at, and stored in a sub- **stroke** memory RAM3. These sub- **strokes** which satisfy the extending condition are changed to one sub- **stroke** and registered, and the collection of the sub- **strokes** which satisfy the pair condition recognized as a boundary of both sides of one character line is classified as one **stroke**, and stored in a **stroke** memory RAM4.

23/3,K/21 (Item 21 from file: 347)
DIALOG(R)File 347:JAPIO
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01302479 **Image available**
DEVICE FOR STORING AND CONTROLLING **HAND - WRITING** INFORMATION

PUB. NO.: 59-014079 [JP 59014079 A]
PUBLISHED: January 24, 1984 (19840124)
INVENTOR(s): AKIMOTO HARUO
SATO KIMINORI
APPLICANT(s): FUJITSU LTD [000522] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 57-122670 [JP 82122670]
FILED: July 14, 1982 (19820714)
JOURNAL: Section: P, Section No. 273, Vol. 08, No. 101, Pg. 164, May
12, 1984 (19840512)

DEVICE FOR STORING AND CONTROLLING **HAND - WRITING** INFORMATION

INTL CLASS: G06K-009/00

ABSTRACT

...as messages, improve the operation performance and expand an application range, by directly inputting the **handwriting** information and displaying the information...

...of a pattern on a tablet 1, the tablet 1 detects the trace, which is **converted** into the set of separated **values** as a coordinate sequence by a coordinate detector 2. The coordinate sequence is stored in...

... 7. When a display request is inputted from a control key 5, the request is **converted** into a control instruction by a decoder 6 and the coordinate sequence is read out...

...a display part 3 as a pattern. The pattern drawn in the tablet 1 is **converted** into the separated coordinate sequence in each **stroke** by the coordinate detector 2 and stored as a **value**, and in case of display, the **value** is displayed on the coordinate corresponding to a display part 3 to restore the original...

23/3,K/22 (Item 22 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2004 JPO & JAPIO. All rts. reserv.

01206882 **Image available**
RECOGNITION SYSTEM FOR INPUT DATA

PUB. NO.: 58-144282 [JP 58144282 A]
PUBLISHED: August 27, 1983 (19830827)
INVENTOR(s): HAKATA MASAYUKI
TAKASHIMA SUSUMU
INAGAKI NAOKI
APPLICANT(s): CASIO COMPUT CO LTD [350750] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 57-116849 [JP 82116849]
FILED: July 07, 1982 (19820707)
JOURNAL: Section: P, Section No. 238, Vol. 07, No. 262, Pg. 66,
November 22, 1983 (19831122)

INTL CLASS: G06K-009/00 ; G06F-003/033; G06K-009/62 ; G06K-009/68 ;
G06K-011/06 ; G06F-015/02

ABSTRACT

PURPOSE: To execute **handwriting** input with minimum input elements by detecting the **number** of pictures and **stroke** characteristics of data inputted from a data input part and matching the **number** of pictures of a reference pattern with the **stroke** characteristics...

...CONSTITUTION: Alphabets and **numerals** are inputted by touching with fingers an input part 11 on which ten-keys and function keys are arrayed like a 5X6 matrix, **convert** these inputs into a coordinate data and store in an input pattern memory 12. Out of the data from the memory 12, the **number** of pictures is extracted by a picture **number** extracting block 13 and stored in a picture **number** memory 14. The input data from the block 13 are divided into four directions on the X-Y coordinates by a **stroke** characteristic extracting block 15 and the directions to which three keys are inputted are extracted as the **stroke** characteristics and stored in a **stroke** characteristic memory 16. A data obtained when the **number** of pictures in the memory 14 is made coincide with the **number** of pictures in a reference pattern memory 18 is selected by a matching block 17...

?

24/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014436963 **Image available**
WPI Acc No: 2002-257666/200230
XRPX Acc No: N02-199457

Networking software program has OS abstraction layer interfacing between
platform independent code and platform dependent code used by first OS
Patent Assignee: TRANSVIRTUAL TECHNOLOGIES INC (TRAN-N); MEHLITZ P (MEHL-I)
; WILKINSON T (WILK-I)

Inventor: MEHLITZ P ; WILKINSON T ; MIHLITZ P; FADER T

Number of Countries: 096 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200215004	A2	20020221	WO 2001US25632	A	20010814	200230 B
US 20020057290	A1	20020516	US 2000225569	A	20000814	200237
			US 2001931391	A	20010814	
US 20020057837	A1	20020516	US 2000225569	A	20000814	200237
			US 2001931393	A	20010814	
US 20020070951	A1	20020613	US 2000225569	A	20000814	200243
			US 2001931576	A	20010814	
AU 200184970	A	20020225	AU 200184970	A	20010814	200245
US 20020091800	A1	20020711	US 2000225569	A	20000814	200248
			US 2001931390	A	20010814	
US 20020099867	A1	20020725	US 2000225569	A	20000814	200254
			US 2001925888	A	20010814	

Priority Applications (No Type Date): US 2000225569 P 20000814; US
2001931391 A 20010814; US 2001931393 A 20010814; US 2001931576 A 20010814
; US 2001931390 A 20010814; US 2001925888 A 20010814

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
WO 200215004	A2	E 93	G06F-009/00	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW				
US 20020057290	A1		G06F-009/00	Provisional application US 2000225569
US 20020057837	A1		G06K-009/00	Provisional application US 2000225569
US 20020070951	A1		G09G-005/00	Provisional application US 2000225569
AU 200184970	A		G06F-009/00	Based on patent WO 200215004
US 20020091800	A1		G06F-015/16	Provisional application US 2000225569
US 20020099867	A1		G06F-009/44	Provisional application US 2000225569

Inventor: MEHLITZ P ...

... WILKINSON T

Abstract (Basic):

... 8) a handwriting recognition software program...

...9) a method of recognizing handwriting on an embedded device input
device...

?

27/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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03015084 **Image available**

HAND-WRITTEN **CHARACTER RECOGNIZING** DEVICE BASED ON FUZZY INFERENCE

PUB. NO.: 01-312684 [JP 1312684 A]
PUBLISHED: December 18, 1989 (19891218)
INVENTOR(s): OMORI KENJI
APPLICANT(s): SAN DENSHI KK [459638] (A Japanese Company or Corporation),
JP (Japan)
OMORI KENJI [000000] (An Individual), JP (Japan)
APPL. NO.: 63-144362 [JP 88144362]
FILED: June 10, 1988 (19880610)
JOURNAL: Section: P, Section No. 1016, Vol. 14, No. 116, Pg. 5, March
05, 1990 (19900305)

HAND-WRITTEN **CHARACTER RECOGNIZING** DEVICE BASED ON FUZZY INFERENCE

ABSTRACT

PURPOSE: To enhance the degree of confidence of the **recognition** of a hand-written **character** by expressing the coefficients of frequencies up to second one by a fuzzy **value** after inputting the hand-written **character** as sequence of points data and Fourier-transforming it by a **stroke** unit, and performing fuzzy inference according to a production rule obtained from a reference pattern...

...CONSTITUTION: In a course in which a **character** is written by hand, a **character** input means 1 outputs the **character** as the sequence of points data corresponding to X- **coordinate** and Y- **coordinate** to an input data normalizing means 3 by a prescribed time intervals. A Fourier transforming means 4 performs the Fourier transformation corresponding to X, Y **moving** amount of the **hand** -written **character** normalized by the input data normalizing means 3 by the **stroke** unit, and intensifies the intensity of the frequency, and further, makes obtained Fourier series data...

...by a fuzzing means 5 so that it can be handled as fuzzy hand-written **character** data. A **recognized character** output means 9 outputs the **character** whose degree of confidence is decided to be high by a fuzzy inferring means 8 as the reference **character** data corresponding to the input hand-written **character** . Thus, processing time required for the **recognition** of the hand-written **character** is shortened.

27/3,K/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
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02068872 **Image available**

GRAPHIC INPUT EQUIPMENT

PUB. NO.: 61-282972 [JP 61282972 A]
PUBLISHED: December 13, 1986 (19861213)
INVENTOR(s): KURII HAJIME
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 60-124282 [JP 85124282]
FILED: June 10, 1985 (19850610)
JOURNAL: Section: P, Section No. 575, Vol. 11, No. 147, Pg. 13, May

14, 1987 (19870514)

ABSTRACT

PURPOSE: To improve remarkably the input speed of a graphic and operability by combining the **recognition** of a hand-written **character**, that of a **hand - drawn** graphic and the calculation of an approaching degree between graphics and generating a drawing made...

...CONSTITUTION: The graphic and **character** are inputted by hand-writing with a stylus pen 13. A CRT 11 displays the **recognized** result of the hand-written **character** and **hand - drawn** graphic or its fair copy, and a plotter 14 outputs the fair copy of the drawing. On the basis of **coordinate** data transmitted from a tablet 12, a graphic input device main body 10 causes a CREC 103 **recognizing** a **character** to operate in terms of **character recognition**, and a pick **detecting** part 102, a graphic **recognizing** part 104, an approaching degree calculating part 105, a **coordinate value** calculating part 106 and an end point and contact point calculating part 107 to operate in terms of graphic **recognition**. A **coordinate value** input part 100, a **stroke end detecting** part 101, a graphic memory 108, a CRT display control part 109 and a plotter control part 110 act both in **character** and graphic **recognitions**.

27/3,K/3 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

014954237 **Image available**
WPI Acc No: 2003-014751/200301
Related WPI Acc No: 1992-349415; 1997-163990; 1999-527169; 2002-689875;
2003-265392; 2003-327414; 2003-327636; 2003-327741
XRPX Acc No: N03-010756

Handwritten script compression encoding method for pen-based computer system, involves determining and sharing datum defining occurrence or absence of change of direction of stroke form current direction

Patent Assignee: MICROSOFT CORP (MICT)
Inventor: FORCIER M D
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6442578	B1	20020827	US 91673292	A	19910320	200301 B
			US 91693316	A	19910429	
			US 9377293	A	19930614	
			US 96711906	A	19960912	
			US 9890761	A	19980604	
			US 98175054	A	19981019	

Priority Applications (No Type Date): US 9377293 A 19930614; US 91673292 A 19910320; US 91693316 A 19910429; US 96711906 A 19960912; US 9890761 A 19980604; US 98175054 A 19981019

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6442578	B1		79	G06F-017/21	CIP of application US 91673292
					CIP of application US 91693316
					Div ex application US 9377293
					Div ex application US 96711906
					Div ex application US 9890761
					CIP of patent US 5220649
					CIP of patent US 5231698
					Div ex patent US 5590257

Handwritten script compression encoding method for pen-based computer system, involves determining and sharing datum defining occurrence or absence of change of direction of stroke from current direction

Abstract (Basic):

... A value from which starting point of stroke is determined , is stored. The current direction of the stroke is established by examining the point placement in the stroke . The direction for each successive data point in the stroke and datum defining occurrence or absence of change of direction of stroke from current direction , are determined and shared.

... 1) Computerized ink strokes smoothing method...

...Simplifies entering, sharing, managing and editing handwritten scripts in pen-based computer system. Recognizes character clusters or units to represent the words or embedded drawings . Provides intuitive interactive user interface for pen-based computer...

...The figure shows the diagram explaining script an ASCII text encoding method...

...Title Terms: DETERMINE ;

27/3,K/4 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009889054 **Image available**

WPI Acc No: 1994-168970/199421

Related WPI Acc No: 2000-330823

XRPX Acc No: N94-133041

Information processing appts. for handwritten input commands - has input pen moving as number of dots on screen to obtain distance and judge whether pen stroke is gesture or pointing entry

Patent Assignee: SHARP KK (SHAF)

Inventor: KURATA M; NAGASAWA H; NAKAJIMA Y; NAKAMURA Y; NAKAO H; SAKAMOTO M ; SHIGEMATSU H

Number of Countries: 005 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 598236	A1	19940525	EP 93116992	A	19931020	199421 B
US 5481278	A	19960102	US 93136209	A	19931015	199607
US 5796406	A	19980818	US 93136209	A	19931015	199840
			US 95457458	A	19950601	
JP 11345072	A	19991214	JP 92283276	A	19921021	200009
			JP 99140944	A	19921021	
EP 598236	B1	20010110	EP 93116992	A	19931020	200103
			EP 2000100830	A	19931020	
DE 69329846	E	20010215	DE 629846	A	19931020	200116
			EP 93116992	A	19931020	
JP 3292752	B2	20020617	JP 92283276	A	19921021	200242

Priority Applications (No Type Date): JP 92283276 A 19921021; JP 92283273 A 19921021; JP 99140944 A 19921021

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 598236 A1 E 44 G06F-003/033

Designated States (Regional): DE FR GB

US 5481278	A	36	G09G-003/02	
US 5796406	A		G06F-015/00	Div ex application US 93136209 Div ex patent US 5481278
JP 11345072	A	17	G06F-003/03	Div ex application JP 92283276
EP 598236	B1 E		G06F-003/033	Related to application EP 2000100830 Related to patent EP 992877
Designated States (Regional): DE FR GB				
DE 69329846	E		G06F-003/033	Based on patent EP 598236
JP 3292752	B2	20	G06F-003/03	Previous Publ. patent JP 6131110

... has input pen moving as number of dots on screen to obtain distance and judge whether pen stroke is gesture or pointing entry

...Abstract (Basic): The information processing apparatus has a screen, an input pen, **position detecting** means to **detect coordinates** on the screen of the pen, reference- **stroke** storing, reference **stroke** selection, processing for editing the text according to an edit instruction corresponding to the reference **stroke** selected by the reference **stroke** selection and inputting **coordinates** of a **position** on the screen input by the pen...

...The first **distance** judges whether a **distance** moved by pen exceeds a certain **distance** and a first processing to select processing to be executed by judging pen movement shorter than a predetermined **distance** as **coordinates** input while judging pen movement longer than predetermined **distance** for a pen **stroke** .

...ADVANTAGE - Even when every **user** uses different **gesture** commands to perform particular function, rate of performing wrong editing operations due to unnecessary commands

...Abstract (Equivalent): an input pen for inputting **coordinates** and drawing a line on said screen...

... **position detecting** means for **detecting coordinates** of a **position** on said screen where a pen point of said input pen makes contact with said...

...reference- **stroke** storing means for storing a plurality of predetermined reference **strokes** ;

...reference- **stroke** selecting means for comparing a pen **stroke** made on a text on said screen by said input pen with the reference **strokes** according to **coordinates detected** by said **position detecting** means and selecting a reference **stroke** which is closest to the pen **stroke** ;

...processing means for editing the text according to an edit instruction corresponding to the reference **stroke** selected by said reference-**stroke** selecting means and inputting **coordinates** of a **position** on said screen pointed by said input pen...

... **character** checking means for judging whether a **character** on which said input pen is put down is a half-size **character** or not...

... **distance** judging means for judging whether a **distance** said input pen is moved on said screen exceeds a predetermined **distance** , a **value** of said predetermined **distance** being **determined** based on whether the **character** is a half-size **character** or not; and...

...by said processing means by judging a pen movement which is shorter than the predetermined **distance** as **coordinates** input while judging a pen movement which is longer than the predetermined **distance** as a pen **stroke** .

...Title Terms: **NUMBER** ;

27/3,K/5 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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008606958 **Image available**
WPI Acc No: 1991-110988/199116
XRPX Acc No: N91-085624

Multi-scale recogniser for hand drawn strokes - using combination of stroke **length**, stroke **angle** and successive filtering to match input strokes to known strokes

Patent Assignee: IBM CORP (IBMC)
Inventor: LIPSCOMB J S
Number of Countries: 006 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat. No	Kind	Date	Week
EP 422403	A	19910417	EP 90117622	A	19900913	199116 B
CA 2022071	A	19910414				199126
US 5038382	A	19910806	US 89421211	A	19891013	199134
EP 422403	A3	19921202	EP 90117622	A	19900913	199343

Priority Applications (No Type Date): US 89421211 A 19891013

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 422403	A				

Designated States (Regional): DE FR GB IT

Multi-scale recogniser for hand drawn strokes - ...

...using combination of stroke **length**, stroke **angle** and successive filtering to match input strokes to known strokes

...Abstract (Basic): In the device known hand **strokes** are serially sampled at different scales by angle filters to provide the known **strokes** at N scales (part 1-4). An unknown **stroke** is also filtered using the same filters to reproduce a series of scaled **strokes** (S1-S4). The unknown **stroke** is compared with the known **strokes** to **detect** a match...

...of filtering (S3, part3) have priority over matches at different filter levels (S3, part 1). **Stroke** lengths are also used with different lengths being classed as short, medium and long...

...USE/ADVANTAGE - Handwriting **recognition** combines angle filtering iwth multiple scales to **recognise** geometric shapes. (28pp Dwg.No.2/22)

...Abstract (Equivalent): The handwritten **character** **recognition** appts. a circuit for sampling a known handwritten **character** . N filters are provided where n is an **integer** greater than or equals 2, with the first filter filtering out **direction** changes less than a first angle int he known handwritten **character** to provide a filtered known **character** . The second such filter filters out **direction** changes less than a second angle in the first filtered known **character** , where the second angle is greater than the first angle for providing a second filtered known **character** . The nth filter filters out **direction**

changes less than an nth angle inn the (nth-1) filtered known **character** , where the nth angle is greater than the (nth-1) angle, to provide an nth filtered known **character** .

...

...The n filtered known **characters** are then stored for subsequent comparison to an unknown handwritten **character** .

...Title Terms: **RECOGNISE** ;

27/3,K/6 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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007690685 **Image available**
WPI Acc No: 1988-324617/198846
XRPX Acc No: N88-245968

One-hand operated keyboard for character generation - has validity table stored in control unit to determine valid combinations of pairs of keys

Patent Assignee: IBM CORP (IBMC)
Inventor: PRAME E S
Number of Countries: 005 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 286906	A	19881019	EP 88105084	A	19880329	198846 B
SE 8701445	A	19881008				198848
SE 460242	B	19890918				198940
US 4988997	A	19910129	US 90481643	A	19900125	199107
EP 286906	B	19911127				199148
DE 3866404	G	19920109				199203

Priority Applications (No Type Date): SE 871445 A 19870407

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
EP 286906	A	E	6	

Designated States (Regional): DE FR GB SE

EP 286906 B

Designated States (Regional): DE FR GB SE

One-hand operated keyboard for character generation...

...has validity table stored in control unit to determine valid combinations of pairs of keys

...Abstract (Basic): line (7). The control unit is arranged to combine keycodes for each pair of consecutive strokes and to generate a corresponding character code...

...of keys must be disposed in a column or a row displaced in a given direction from the column or row in which the first key is disposed...

...USE/ADVANTAGE - On-line programming, word processing, graphics where one hand types and other moves cursor, computer operation whilst operating aeroplane or other vehicle, handicapped user, weapons systems, electronic notebook. Large number of character codes are able to be generated from relatively few keys...

...Abstract (Equivalent): A method of detecting incorrect key strokes in keyboards where the character generation is accomplished by two

keystrokes per **character** , comprising sequentially pressing a first and a second key without overlapping, **characterised** by sensing the **position** on the keyboard of the second key relative to the first key in the sequence...

...either in a column or in a row that is located displaced in a predetermined **direction** from said column or row where the first key is located, in order that the combination of keys in the sequence be decoded as valid and generate a **character** , and by generating an error signal and sending said error signal to an error unit...

...Abstract (Equivalent): Each **character** in a stream of input **characters** is generated by pairs of two sequential keystrokes. Erroneous keystrokes are **detected** by striking a first key and then a second key in sequence without overlapping the keystrokes, the striking of keys being **characterized** in that the **position** of the second key in relation to the first key of the sequence is sensed...

...rule stating that the second key of each keystroke pair is always displaced from the **position** of the first key in the keystroke pair in the same predefined **direction** in order for the combination to be decoded as valid. The **character** is generated corresponding to each keystroke pair decoded as valid. An error is generated for...

...keystroke pair decoded as invalid. immediately following the decoding and restoring synchronism to the remaining **characters** in the stream of input **characters** . USE - For **detection** of erroneous keystrokes in a data entry system having a keyboard, control unit and an...

...Title Terms: **CHARACTER** ;

?

32/3,K/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
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07146903 **Image available**
DEVICE AND PROGRAM FOR HANDWRITTEN CHARACTER RECOGNITION AND
COMPUTER-READABLE RECORDING MEDIUM WITH RECORDED HANDWRITTEN CHARACTER
RECOGNIZING PROGRAM

PUB. NO.: 2002-015282 [JP 2002015282 A]
PUBLISHED: January 18, 2002 (20020118)
INVENTOR(s): NAKAO ICHIRO
ITO YOSHIKATSU
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD
APPL. NO.: 2001-117952 [JP 2001117952]
FILED: April 17, 2001 (20010417)
PRIORITY: 2000-118986 [JP 2000118986], JP (Japan), April 20, 2000
(20000420)

DEVICE AND PROGRAM FOR HANDWRITTEN CHARACTER RECOGNITION AND
COMPUTER-READABLE RECORDING MEDIUM WITH RECORDED HANDWRITTEN CHARACTER
RECOGNIZING PROGRAM

INTL CLASS: G06K-009/62 ; G06F-017/22; G06K-009/34
ABSTRACT

PROBLEM TO BE SOLVED: To provide a handwritten character recognizing
device that accurately decides the input completion of a handwritten
character string inputted to a character string input area which do not
have character input frames by characters .

SOLUTION: A user inputs a handwritten character string to the character
string input area which is large enough to handwrite characters . A
coordinate value detection part 102 detects coordinate strings by
strokes constituting the inputted handwritten character string. An
input completion decision part 104 decided whether or not the input time
difference between the tail coordinate of a last inputted stroke and a
detected head coordinate is larger than a specific time when the
head coordinate of the stroke is detected in a 1st area on a
character writing start side and decides that the input of the last
handwritten character string is completed when so. A character
segmentation part 105 segments all the strokes into stroke arrays by
characters and a character recognition part 106 recognizes
respective characters from the respective stroke arrays and outputs
them.

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32/3,K/2 (Item 2 from file: 347)
DIALOG(R)File 347:JAPIO
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03263887 **Image available**
CHARACTER RECOGNIZING DEVICE

PUB. NO.: 02-239387 [JP 2239387 A]
PUBLISHED: September 21, 1990 (19900921)
INVENTOR(s): YAMADA YOSHIMI
SHINODA NAOTO
APPLICANT(s): OKI ELECTRIC IND CO LTD [000029] (A Japanese Company or

Corporation), JP (Japan)
APPL. NO.: 01-059585 [JP 8959585]
FILED: March 14, 1989 (19890314)
JOURNAL: Section: P, Section No. 1141, Vol. 14, No. 558, Pg. 167,
December 12, 1990 (19901212)

CHARACTER RECOGNIZING DEVICE

INTL CLASS: G06K-009/62 ; G06F-003/03; G06K-009/20

ABSTRACT

PURPOSE: To compare and collate a **recognizing** processing in a limited type, to shorten a **recognizing** time, and to improve **recognition** accuracy by setting the section of the plotting surface of a tablet into **character** types according to dividing formats to a partial patterns...

...CONSTITUTION: A dictionary circuit 2 stores the standard data of KANJI (Chinese **character**) which can be divided into the plural partial patterns in units of the partial pattern, and classifies them according to the **number** of **strokes**. Next a **character** type detecting circuit 3 detects the type in the dividing format of the handwritten **character** from **coordinate** data outputted by a tablet 1. Further when the handwritten **character** type can be divided into the partial patterns, a **recognizing** circuit 4 detects the **number** of the **strokes** at every pattern, reads the standard data at the same **number** of the **strokes**, compares and collates the data with the handwritten **coordinate** data, and identifies the handwritten **character** as the **character** of the circuit 2. Thus the **recognizing** processing can be executed with the use of the **limited** patterns, the **recognizing** time can be shortened, and the **recognition** accuracy can be improved.

32/3,K/3 (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
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02771296

ONLINE HANDWRITTEN CHARACTER RECOGNIZING DEVICE

PUB. NO.: 01-068896 [JP 1068896 A]
PUBLISHED: March 14, 1989 (19890314)
INVENTOR(s): KAMEI SHOICHI
APPLICANT(s): SANYO ELECTRIC CO LTD [000188] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 62-226080 [JP 87226080]
FILED: September 09, 1987 (19870909)
JOURNAL: Section: P, Section No. 892, Vol. 13, No. 284, Pg. 34, June 29, 1989 (19890629)

ONLINE HANDWRITTEN CHARACTER RECOGNIZING DEVICE

INTL CLASS: G06K-009/62

ABSTRACT

PURPOSE: To shorten **recognition** time by performing **recognition** processing simultaneously with the end of **strokes** in case of the presence of an input area where at least one **character** can be inputted...

...CONSTITUTION: When the **recognition** time is a **set value** or shorter, **time** counting is continued to monitor a pen-on signal, and the present **recognition** result is invalidated to continue the input of

coordinates of following strokes if the pen-on signal is detected within the set time . If the pen-on signal is not detected in the set time , the recognition result is outputted. When the recognition time is longer, the pen-on signal is monitored even during the recognition processing because there is possibility that the next stroke is inputted during the recognition processing, and the recognition processing is interrupted to continue the input of coordinates of following strokes if the pen-on signal is detected . A waiting time change part is provided to adjust and set the waiting time by a writer himself. Thus, the recognition time is shortened because the recognition processing is performed simultaneously with the end of strokes .

32/3,K/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO
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02750588 **Image available**
ONLINE CHARACTER RECOGNIZING SYSTEM

PUB. NO.: 01-048188 [JP 1048188 A]
PUBLISHED: February 22, 1989 (19890222)
INVENTOR(s): YAMADA YOSHIMI
SHINODA NAOTO
TANIMOTO HIDEO
APPLICANT(s): OKI ELECTRIC IND CO LTD [000029] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 62-204078 [JP 87204078]
FILED: August 19, 1987 (19870819)
JOURNAL: Section: P, Section No. 882, Vol. 13, No. 250, Pg. 14, June 12, 1989 (19890612)

ONLINE CHARACTER RECOGNIZING SYSTEM

INTL CLASS: G06K-009/62 ; G06K-009/34

ABSTRACT

PURPOSE: To increase the recognition speed of a written character by using character segmentation based on a character frame as well as that based on time monitor to segment the character in an optimum time in accordance with the number of strokes .

...

...CONSTITUTION: A first segmenting means 3 which segments an input character when detecting a stroke in a character frame different from the just preceding stroke based on coordinate data outputted from a tablet 1, an extracting means 4 which extracts features of respective strokes of the input character based on coordinate data, and a second segmenting means 6 are provided, and this means 6 segments the input character when turning-off after the end of strokes continues over the time preliminarily set for the number of strokes based on coordinate data. The input character is recognized in a recognizing means 8 based on feature information extracted by the extracting means 4, and the recognition result is outputted based on segmentation results of segmenting means 3 and 6. Thus, optimum character segmentation is performed to increase the recognition processing speed.

32/3,K/5 (Item 5 from file: 347)

DIALOG(R)File 347:JAPIO
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01755281 **Image available**
CHARACTER SORTING METHOD

PUB. NO.: 60-233781 [JP 60233781 A]
PUBLISHED: November 20, 1985 (19851120)
INVENTOR(s): YANO MASAHISA
 YAMASHITA YOSHIYUKI
 ATSUMI SHIRO
APPLICANT(s): OKI ELECTRIC IND CO LTD [000029] (A Japanese Company or
 Corporation), JP (Japan)
APPL. NO.: 59-089271 [JP 8489271]
FILED: May 07, 1984 (19840507)
JOURNAL: Section: P, Section No. 447, Vol. 10, No. 101, Pg. 157, April
 17, 1986 (19860417)

CHARACTER SORTING METHOD

INTL CLASS: G06K-009/62

ABSTRACT

PURPOSE: To sort accurately **stroke** data into **character** and pattern data by deciding a **character** when the length of **strokes** of the handwritten pattern and **character** is smaller than the prescribed **value** and otherwise deciding a pattern respectively...

...a pen (pen-down through pen-up) on a tablet 1 are sampled every fixed **period** of **time**. Thus the time series data on the pen **coordinate value** is obtained and stored to a **stroke** memory 2 and to a **stroke** length **detector** 3. The **detector** 3 calculates the **stroke** length L1 continuous until a pen-up signal is **detected** and input it to a **stroke** length decider 4. The decider 4 compares the length L1 with the **value** Lc of a **character stroke** threshold **value** ROM5. Then the pattern data is decided when the L1 is larger than the Lc. A control signal is outputted to a **stroke** data switch 6, and the time series data stored in the memory 2 are sorted into the **character** and pattern **strokes** and delevered.

32/3,K/6 (Item 6 from file: 347)
DIALOG(R)File 347:JAPIO
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01755280 **Image available**
CHARACTER SORTING METHOD

PUB. NO.: 60-233780 [JP 60233780 A]
PUBLISHED: November 20, 1985 (19851120)
INVENTOR(s): YANO MASAHISA
 YAMASHITA YOSHIYUKI
 ATSUMI SHIRO
APPLICANT(s): OKI ELECTRIC IND CO LTD [000029] (A Japanese Company or
 Corporation), JP (Japan)
APPL. NO.: 59-089270 [JP 8489270]
FILED: May 07, 1984 (19840507)
JOURNAL: Section: P, Section No. 447, Vol. 10, No. 101, Pg. 156, April
 17, 1986 (19860417)

CHARACTER SORTING METHOD

INTL CLASS: G06K-009/62

ABSTRACT

PURPOSE: To sort accurately **stroke** data into **character** and pattern data by deciding a **character** when the length of the long side of a rectangular frame defining a **stroke** as its diagonal line is smaller than the prescribed **value**, and otherwise deciding a pattern respectively...

...a pen (pen-down through pen-up) on a tablet 1 are sampled every fixed **period** of **time**. Thus the time series data on the pen **coordinate value** is obtained and inputted to a **stroke** memory 2 and a **stroke** frame **detector** 3. The **detector** 3 **detects** and renews successively the maximum and minimum **values** of (x) and (y) respectively from the time series data on the **coordinate value**. When a pen-up signal is **detected**, a long side decider 4 compares the calculated long side frame data L1 with the **value** Lc of a **character stroke** deciding ROM5. Then the pattern data is decided when the **value** L1 is larger than the **value** Lc. A control signal is outputted to a **stroke** data switch 6, and the time series data stored in the memory 2 are sorted into the **character** and pattern **strokes**.

32/3,K/7 (Item 7 from file: 347)
DIALOG(R)File 347:JAPIO
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01738976 **Image available**

RECOGNIZING SYSTEM OF ON-LINE HANDWRITTEN CHARACTER

PUB. NO.: 60-217476 [JP 60217476 A]
PUBLISHED: October 31, 1985 (19851031)
INVENTOR(s): KUROSAWA YOSHIAKI
NAKAMURA YOSHIKATSU
OI KATSUNORI
HITAI YUTAKA
APPLICANT(s): TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 59-071761 [JP 8471761]
FILED: April 12, 1984 (19840412)
JOURNAL: Section: P, Section No. 441, Vol. 10, No. 80, Pg. 62, March
29, 1986 (19860329)

RECOGNIZING SYSTEM OF ON-LINE HANDWRITTEN CHARACTER

INTL CLASS: G06K-009/62

ABSTRACT

PURPOSE: To attain description of a **character** without notifying a **position** or a section of a **character** frame by segmenting and **recognizing** the **character** in response to the size of the set **character** and **recognizing** and replacing again the **character** when the next **stroke** is within the **character** area...

...CONSTITUTION: A writer describes a **character** on a tablet 2 by a pen 1. X, Y **coordinates** obtained are fed to a **detection** and segmentation section 3, where the **stroke** group in the unit of one character is extracted, it is transferred to a **character recognizing** section 4, the **character** **recognition** based thereupon is attained and the result is outputted to a line 5. Suppose that a **time** over a **threshold value** is

elapsed until the **stroke** next to the **stroke** written at first is described, the **stroke** string written at first is regarded as one **character** and the **character** is **recognized**. Then the next **stroke** string is inputted and when it is discriminated that it is within one **character** frame, it is regarded as one **character** together with the preceding **stroke** string so as to attain **character recognition**. The result of discrimination, the similarity obtained at **recognition** and the **position** of **stroke** group are outputted as correct result of **recognition**.

32/3,K/8 (Item 8 from file: 347)
DIALOG(R) File 347:JAPIO
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01708481 **Image available**
ON-LINE **CHARACTER RECOGNIZING DEVICE**

PUB. NO.: 60-186981 [JP 60186981 A]
PUBLISHED: September 24, 1985 (19850924)
INVENTOR(s): YOSHIDA KAZUNAGA
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 59-042319 [JP 8442319]
FILED: March 06, 1984 (19840306)
JOURNAL: Section: P, Section No. 429, Vol. 10, No. 41, Pg. 62,
February 18, 1986 (19860218)

ON-LINE **CHARACTER RECOGNIZING DEVICE**

INTL CLASS: G06K-009/62

ABSTRACT

PURPOSE: To improve **recognition** precision by reflecting information on the on/ off easiness of a pen for every **stroke** when **distance** is calculated...

...CONSTITUTION: A **stroke** of writing on a tablet 41 is outputted as x, y **coordinate** data **xy** and pen on/off.data P at **specific** intervals of **time**. A **distance** calculation part 48 calculates the **distance** dd between a **direction** angle (a) from **direction** memory 43 and a **direction** angle (b) from standard **direction** angle pattern memory 45. Penalty memory 46 outputs penalty W directly with the pen on...

...address signal Ai. This penalty W is added by an addition part 49 to the **distance** dd to output **distance** d(i, j), and a minimum calculation part 51 outputs a **character** category which gives the minimum **value** of interpattern **distance** D of every **character** of a standard pattern as a **recognition** result R.

32/3,K/9 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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012642834 **Image available**
WPI Acc No: 1999-448939/199938
XRPX Acc No: N99-335425

Write-in data input apparatus for e.g. portable terminal equipment e.g. personal digital assistant PDA - has removal device which extracts input **stroke** in RAM if distinguished point **stroke** or number of **stroke**

**exceeds predetermined value and clock after stroke input exceeds
predetermined time**

Patent Assignee: CASIO COMPUTER CO LTD (CASK)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11184969	A	19990709	JP 97357729	A	19971225	199938 B

Priority Applications (No Type Date): JP 97357729 A 19971225

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 11184969	A	8	G06K-009/62	

... **has removal device which extracts input stroke in RAM if
distinguished point stroke or number of stroke exceeds
predetermined value and clock after stroke input exceeds
predetermined time**

...Abstract (Basic): NOVELTY - A removal device extracts the input **stroke**
in the RAM when a distinguished point **stroke** of a CPU (2) or the
number of stroke is below the predetermined **value** , and the clock
after **stroke** input exceeds the **predetermined time** . DETAILED
DESCRIPTION - The CPU distinguishes point **stroke** when the computed
distance of stroke movement is below the set-up **coordinate value**
stored in a RAM (6). The CPU also performs **character recognition**
and **analyzes the coordinate** data input to a tablet (4), by dividing
the input writing data per **stroke** . An INDEPENDENT CLAIM is also
included for a memory medium...

...ADVANTAGE - Increases reliability of **character recognition** ,
efficiency of data input and offers labor saving for input data
correction, since removal of incorrect **character** input is performed
automatically using a computer. DESCRIPTION OF DRAWING(S) - The figure
shows the...

...Title Terms: **STROKE** ;

International Patent Class (Main): **G06K-009/62**

32/3,K/10 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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003970214

WPI Acc No: 1984-115758/198419

XRPX Acc No: N84-085570

**Character recognition appts. with pen position detector -
determines length and gradient of line segments and allocates
distinction code to each stroke of character**

Patent Assignee: SUMITOMO ELECTRIC IND CO (SUME)

Inventor: OOKA A; SATOH K; WADA Y

Number of Countries: 010 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 107196	A	19840502	EP 83110547	A	19831021	198419 B
US 4542526	A	19850917	US 83543817	A	19831020	198540
CA 1209264	A	19860805				198636
EP 107196	B	19880817				198833
DE 3377751	G	19880922				198839
KR 8802662	B	19881217				198930

Priority Applications (No Type Date): JP 82185839 A 19821021

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
EP 107196 A E 21
Designated States (Regional): CH DE FR GB IT LI SE
EP 107196 B E
Designated States (Regional): CH DE FR GB IT LI SE

Character recognition appts. with pen position detector - ...

... determines length and gradient of line segments and allocates distinction code to each stroke of character

...Abstract (Basic): A character, numeral or mark is recognised by detecting the position of a stylus pen for writing on a tablet. A detector unit ascertains its position in terms of three coordinate axes of X, Y and Z. A detection circuit senses the initiation and completion of movement of the pen for writing one character by detecting change of position of the pen on the vertical coordinate axis to the surface of the tablet and by detecting deviation of the position on the Z axis and by comparing the difference of the two pen positions on the plane axis (X and Y plane) before and after the change of pen position.

...A character size normalising circuit makes sizes of written characters uniform by processing data on the pen positions on the plane (X and Y plane) according to given equations. A recognition circuit recognises characters by combination in terms of the order of occurrence of the distinctions of strokes.

...Abstract (Equivalent): A character recognition apparatus in which a character, numeral or mark, hereafter described as a character, is recognised by detecting the position of a stylus pen for writing on a tablet, said pen having position - detecting means, in terms of three coordinate axes of X, Y and Z comprising: detection circuit means (5, 6, 7) for detecting the initiation and completion of the movement of said pen (3) for writing one character by detecting change of the position of said pen (3) on the vertical coordinate Z-axis to the surface of said tablet (1) and by comparing the separation in the X-Y plane or the elapsed time associated with successive changes in position on the Z-axis with threshold values; character size normalising circuit means (9) for making sizes of written characters uniform by processing data on the pen positions on the plane (X and Y plane) according to the following equations: $X' = C(X_t)$...

...B (2) where A is the maximum shift of said pen (3) on the X-coordinate axis and B is that of said pen (3) on the Y-coordinate axis, C is a desired size of character after normalisation, X_t , Y_t are coordinates of said pen (3) position on the axes of X and Y, respectively, X_{min} , Y_{min} are the minimum value of the position of said pen (3) for writing one character on the X and Y axes, respectively, and X' and Y' are transformed coordinates after the normalisation; calculating circuit means for determining the gradient θ and the length L of a line segment in a stroke of a character by processing data on the pen position upon writing according to the following equation: $A = X'_t - X'_{t-1}$ (3) B...

...sq. rt (a sq. ; b sq) where X'_t , X'_{t-1} are transformed X-coordinates taken at the time t, and t-1, respectively, and Y'_t , Y'_{t-1} are also transformed Y-coordinates taken at times T and t-1; determination

means for extracting the identity of a **stroke** of a **character** by order of occurrence of theta and L of line segment(s) of
...Abstract (Equivalent): During movement of the pen over the table surface, initiation and completion of a **stroke** of a **character** is **detected** when the vertical **position** of the pen which is expressed as the Z- **coordinate** shifts. The end of writing a **character** is also **detected** either when the pen has moved across the tablet far beyond the **distance** of a normalising size of the **character** or when the passage of time between the occurrence of two adjacent discontinuities of the Z- **coordinate** exceeds a preset **value** , e.g., when the stylus is lifted off the tablet for more than a **predetermined time** .

...

...The length (L) and the gradient (O) of a line segment of a **stroke** is **determined** by examining the X and Y **coordinates** of the start and end points of the line segment. The line segments are classified...

...to each line length and gradient. The particular order of occurrence of the codes identifies **stroke** order and hence a **character** . A specific **character** is **determined** by comparing the code order with those preset in a table of codes

Title Terms: **CHARACTER** ;

International Patent Class (Additional): **G06K-009/22**

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